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STATE COLLEGE

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LOWELL

CATALOG: 1967-1968

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The college seal, reproduced on the back cover, reflects the purpose of the institution, the particular academic pursuits to which it is committed, and the authority from which it derives.

The design over the shield, like the motto which supports it, reinforces the ideas systematically developed on the shield itself. Over the shield is the blazing torch, the symbol of truth, and the name of the college. Supporting the shield is the motto "Vitai Lampada Tradunt" ("They pass on the torch of life"), a phrase taken from the *De Rerum Natura* of Lucretius.

In the center of a rightward bar, is the seal of the Commonwealth from which the authority of the college to grant degrees derives. In the right and left sectors of the tripartite shield are a book and a lyre, symbolizing both the chief interests of the college and the Platonic means through which learning is achieved. The book symbolizes the disciplines of education and the arts, the dialectical pursuit of truth, and the means of preserving knowledge, and the lyre symbolizes the discipline of music and the harmony of all knowledge in ideal truth. Thus, the book and the lyre together indicate the means by which truth is served and pursued.

CONTENTS

BOARD OF TRUSTEES	6
FACULTY	7
ACADEMIC CALENDAR	16
THE COLLEGE	
EDUCATIONAL AIMS	17
ACADEMIC STATUS	18
THE CAMPUS	18
FACILITIES	19
LIBRARY	19
RESIDENCE HALLS	20
OFF-CAMPUS FACILITIES	20
HISTORY	20
DEGREE PROGRAMS	
EDUCATIONAL DESIGN	22
BACHELOR OF SCIENCE IN EDUCATION: ELEMENTARY	
EDUCATION	23
BACHELOR OF SCIENCE IN EDUCATION: EARLY	
CHILDHOOD EDUCATION	26
BACHELOR OF SCIENCE IN EDUCATION: PRIMARY	
SCHOOL EDUCATION	29
BACHELOR OF SCIENCE IN EDUCATION: MIDDLE	
SCHOOL EDUCATION	32
BACHELOR OF ARTS: BIOLOGY	35
BACHELOR OF ARTS: ENGLISH	38
BACHELOR OF ARTS: HEALTH	41
BACHELOR OF ARTS: HISTORY	44
BACHELOR OF MUSIC EDUCATION	47
BACHELOR OF SCIENCE: NURSING	50
ADMISSION POLICIES	
ADMISSION REQUIREMENTS	51
PROCEDURES FOR ADMISSION	53
ADMISSION TO ADVANCED STANDING	54
ADMISSION TO PROFESSIONAL EDUCATION PROGRAMS	55
ACADEMIC POLICIES	
GRADING SYSTEM	56

ACADEMIC STANDING	56
COURSE DEFICIENCIES	57
ACADEMIC HONORS	57
DEGREE REQUIREMENTS	58
WITHDRAWAL FROM THE COLLEGE	58

PERSONNEL SERVICES

COUNSELING	59
STUDENT HEALTH SERVICES	59
RESIDENT LIVING	60
PLACEMENT SERVICES	60

STUDENT ACTIVITIES

STUDENT GOVERNMENT	61
CAMPUS BOOKSTORE	61
PUBLICATIONS	62
DRAMATICS	62
MUSICAL ACTIVITIES	62
SPORTS ACTIVITIES	63
RELIGIOUS ACTIVITIES	63

FEES AND EXPENSES

TUITION FEE	65
REGISTRATION FEE	65
STUDENT ACTIVITIES FEE	65
RESIDENCE FEE	65
MUSIC ACTIVITIES FEE	66
PAYMENT OF FEES	66
REFUNDS	67
OTHER EXPENSES	67

COURSES OF INSTRUCTION

ART	85
BIOLOGY	69
CHEMISTRY	72
ECONOMICS	104
EDUCATION	73
ENGLISH	78
FINE ARTS	85
FRENCH	104
GEOGRAPHY	104
GERMAN	106
GREEK	108

GOVERNMENT	103
HEALTH	94
HISTORY	98
ITALIAN	106
LATIN	109
MATHEMATICS	109
MUSIC	87
PHILOSOPHY	111
PHYSICAL EDUCATION	97
PHYSICS	72
PSYCHOLOGY	68
SPANISH	107
GRADUATE SCHOOL	
OFFICERS OF ADMINISTRATION	112
GRADUATE COUNCIL	112
ACADEMIC CALENDAR: GRADUATE SCHOOL	113
ADMISSION POLICIES: GRADUATE SCHOOL	
REQUIREMENTS FOR ADMISSION	115
PROCEDURES FOR ADMISSION	116
ACADEMIC POLICIES: GRADUATE SCHOOL	
ACADEMIC ADVISER	118
TRANSFER CREDIT	118
GRADING SYSTEM	118
DEGREE REQUIREMENTS	119
COURSE LOAD	119
SCHEDULE OF CLASSES	119
FEES AND EXPENSES: GRADUATE SCHOOL	
TUITION FEE	120
REGISTRATION FEE	120
GRADUATE STUDENT ACTIVITIES FEE	120
MUSIC ACTIVITIES FEE	120
PAYMENT OF FEES	120
INFORMATION FOR VETERANS	120
GRADUATE DEGREE PROGRAMS	
MASTER OF EDUCATION	122
MASTER OF MUSIC EDUCATION	125

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RUTH DAVIDSON	Piano
JOHN EVANS	Brass
DEAN FARNHAM	Brass
OLIVE FLAGG	Piano
FRANK GAVIANI	Accordion
ELSA GERLING	Voice
WILLIAM GRASS	Woodwinds
DOROTHEA JUMP	Strings
INGE LINBLAD	Piano
HAZEL O'DONNELL	Voice
JEANNE PAELLA	Brass
NATALO PAELLA	Brass
MYRON PRESS	Piano
DONALD SMITH	Piano
RICHARD SUMMERS	Woodwinds
WALTER TOKARCZYK	Percussion
WILLIAM WRZESIEN	Woodwinds
MILDRED ZUCKER	Piano

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DOROTHEA PROVENCHER	<i>Payroll Records</i>
MARIE SHERMAN	<i>Secretary to the Academic Dean</i>

ACADEMIC CALENDAR

FALL SEMESTER, 1967

September	5-8	Freshman Week
	11	First meetings of classes
October	12	Columbus Day: no classes
November	10	Veterans' Day: no classes
	23-24	Thanksgiving recess
December	18	Christmas recess begins
January	3	Resumption of classes
	15	Final meetings of classes
	16	Reading day
	17	Examinations in courses begin
	23	Examinations in courses end
	24-30	Winter recess

SPRING SEMESTER, 1968

January	31	First meetings of classes
February	22	Washington's Birthday: no classes
March	11	Spring recess begins
	18	Resumption of classes
April	12	Easter recess begins
	22	Resumption of classes
May	29	Final meetings of classes
	30	Memorial Day
	31	Reading day
June	3	Examinations in courses begin
	7	Examinations in courses end
	9	Commencement

THE COLLEGE

EDUCATIONAL AIMS

The educational design which the college provides for its students is based upon the conviction that the primary purpose of education is intellectual development and that it is best achieved through a broad liberal education. This then encourages the development of one's capacities as a person and helps to secure a reasoned use of freedom in an increasingly complex society.

Liberal education is not concerned with the mere acquisition of knowledge. Rather, its purpose is to aid the individual to develop, in terms of his capacity, an inquiring and independent mind and critical judgement. It stresses the ability to use knowledge with wisdom, perceiving its inherent principles and relationships. It provides experiences which contribute to strength of character and to a sense of personal responsibility. Liberal education further seeks to broaden perspective and understanding, to develop an increasing awareness of the fundamental values underlying civilization and culture, and of the basic problems of man and society.

These qualities are needed by individuals who have been endowed with intellectual ability and who have a responsibility to develop and use it effectively, not only for their personal benefit but also for that of others. We live in a society whose potentialities and limitations we ignore at our peril, and whose heritage we must know if we are to conserve those values, principles, and institutions essential to individual and social welfare in a free society.

Implicit in the educational design is the belief that a liberal education not only enhances a way of life but also serves as a firm foundation upon which the specialization demanded by our culture is developed. Professional or specialized education is more productive when intellectual capacities have been developed, when reasoned thinking prevails, when ideas and conclusions are expressed clearly, and when students comprehend the nature of the world in which they must live and the purposes for which they strive.

The college recognizes that its students vary in their aptitudes and interests and that they aspire ultimately to differing careers. Accordingly, it incorporates in its educational design specialized or professional education. The purpose here is to educate the individual in the basic fields of knowledge relevant to his career, to lead him to acquire an understanding of its fundamental principles and procedures, and to provide experiences wherein he may exercise reason and judgment and apply critical analysis in the solution of problems which arise in and are pertinent to his chosen career.

ACADEMIC STATUS

The academic excellence of a college is symbolized by its accreditations; it is dependent upon the qualitative standards which the college demands of itself, its faculty, and its students.

This college is a fully accredited member of the New England Association of Colleges and Secondary Schools, and is accredited by the National Council of Accreditation for Teacher Education.

In addition, it is a member of the American Association of Colleges for Teacher Education, the Eastern States Association of Professional Schools for Teacher Education, the American Association of University Women, and the Association of State Colleges and Universities.

Accreditation indicates to a student that this college is recognized and approved by select regional and national associations concerned with the quality of higher education. It also assures him that study undertaken here has transfer value to other institutions of higher learning and that the degree earned here will be an asset upon entrance to a career and in seeking admission to graduate study at any other college or university.

THE CAMPUS

The college campus has a commanding view of the winding Merrimack River which it overlooks and borders in Lowell, a city located twenty-five miles northwest of Boston. From the northern Pawtucket Street boundary which parallels the river, the twenty-two acre campus sweeps upward, is bisected by Broadway, and continues in a southerly direction.

FACILITIES

At present, the facilities of the college include the following buildings:

HUMANITIES. Located in the center of the campus, this building houses the offices of the President, the Academic Dean, the Director of Admissions, the Dean of Women, and administration. In addition, this building contains such facilities as a student lounge, a dining hall, language laboratories, classrooms, a music instruction center, and a closed circuit television studio.

SCIENCE. This building is designed with a central structure and two wings. The central part contains biology, physics, and chemistry laboratories, classrooms, and offices of the Departments of Biological and Physical Sciences, and of Mathematics. One wing contains the gymnasium, offices of the Department of Health Education and Physical Education, and the health service office. The other wing houses the Little Theater.

EDUCATION. A large, three-storied building, it contains classrooms, an art studio, and offices of the Departments of Art, Behavioral Sciences, Education, and History.

PRESIDENTS HALL. This building contains a faculty lounge and the offices of the Departments of English, Languages, and Music.

LIBRARY

The college library is located on the main floor of the Humanities building. It contains a spacious reading room with an adjoining reference section, a reserve book area, and an open shelf stack room. Adjacent to the reading room is a current periodical reading and browsing room.

The library houses a collection of 45,000 volumes and has a potential capacity of 50,000 or more. Also available to students and faculty are 225 periodical titles, microfilms, and a microfilm reader. The services of the library include the loan of books, pamphlets, filmstrips, and recordings to registered borrowers.

The Curriculum Materials Center is also located in the library. This educational resources center contains textbooks for both the elementary and secondary levels, literature for children and adolescents, a test collection, curriculum guides, and other materials of value to students preparing to teach.

RESIDENCE HALLS

Facilities for resident living on campus are available, at the present time, for women students. Concordia Hall is a modern residence structure which provides very comfortable and attractive accommodations for 180 women students. Ninety single and forty-five double rooms are available. This residence hall is located at the northern end of the campus and overlooks the Merrimack River.

The college regulations concerning off-campus living accommodations for men are presented in the chapter entitled *Personnel Services*.

OFF-CAMPUS FACILITIES

A very important aspect of the college's program is its off-campus facilities for students who are enrolled in degree curricula which prepare for teaching in the elementary and secondary schools.

Professional experiences, including student teaching, are provided in Lowell and in thirty cooperating school systems in Massachusetts.

The school systems which cooperate in the Elementary Education Student Teaching program are: Acton, Andover, Ayer, Bedford, Burlington, Chelmsford, Concord, Dunstable, Groton, Haverhill, Lexington, Littleton, Methuen, North Andover, Pepperell, Salisbury-Newbury, Tewksbury, Tyngsboro, Westford, and Wilmington.

These school systems cooperate in the Secondary Education Student Teaching program: Acton, Andover, Ayer, Bedford, Billerica, Burlington, Chelmsford, Concord, Dracut, North Andover, Tewksbury, Wakefield, Westford, Wilmington, and Woburn.

Cooperating in the Music Education Student Teaching program are the following school systems: Acton, Arlington, Bedford, Billerica, Burlington, Haverhill, Lawrence, Leominster, Maynard, Tewksbury, Weston, Wilmington, and Winchester.

HISTORY

The college was established by the legislature of the Commonwealth of Massachusetts on January 6, 1894. Reflecting the educational philosophy and objectives of that era, the institution so created was named the Massachusetts State Normal School at Lowell. Its purpose was the education of teachers; its program was a two year one in Elementary Education.

The scope of the curriculum was expanded in 1912 when a three-year program in Music Education was initiated. No further change was effected until 1927. At that time, the curriculum in Elementary Education was broadened and extended to a three-year program. At the same time, a significant change was made in the curriculum in Music Education and its program was developed into a four-year degree one. The first degrees were awarded in 1928.

Again reflecting the impact of social change and the professionalization of teacher education, the institution was granted, in 1932, a change of status to that of a four-year college. Accordingly, it was vested with the authority to confer degrees. It then became the State Teachers College at Lowell with the right to confer the degree of Bachelor of Science in Education upon students majoring either in Elementary Education or in Music Education.

Further evidence of its growth occurred in 1959 when a program designed for students preparing to teach in the secondary school was inaugurated. In retrospect, the development of the college reveals its constancy of purpose and its continuous concern for the improvement of teacher education.

It was inevitable, however, that the singular concern of this publicly-supported college be evaluated in light of the demands made upon higher education. Effective in 1960, this college was designated the State College at Lowell and was authorized to expand its function and its degree programs.

DEGREE PROGRAMS

EDUCATIONAL DESIGN

The design basic to all degree curricula consists of a two-fold program of liberal education and a concentration within a particular field of study. This concentration enables the student to acquire the values that accrue from studying in depth a certain area of knowledge and to achieve such mastery in it that he will be able to manipulate its concepts and skills with independence and judgment.

To insure the values of liberal education and a unifying intellectual experience for all students, the educational design also provides a required core of studies. Its purpose is to enable the student to acquire a breadth of knowledge of our cultural and scientific heritage, and the ability to relate and assess the principles and values contained therein critically and independently.

This program of studies in the liberal arts, commonly referred to as general education, is required in each of the degree curricula. It serves as a foundation for further study and assures an integrative experience among educated men and women. Regardless of the individual choice of concentration, all students will secure an understanding of the literary and fine arts which record man's insights into experience; the organizations and institutions of society and of man's role therein; the social, economic, political, and moral principles of the democracy in which they live; the import for the modern world of scientific developments; and the role of philosophy in the solution of man's problems.

In the degree programs which prepare for teaching in the elementary or secondary school, the design not only provides for liberal education and a concentration within an academic discipline but also for professional education. In the later, the prospective teacher acquires knowledge of the philosophical and psychological bases of education, and develops critical judgment relative to the purposes of instruction and the manner in which they shall be accomplished.

BACHELOR OF SCIENCE IN EDUCATION: ELEMENTARY EDUCATION*

This degree program is designed for men and women who plan a career in teaching in the public elementary schools. The crucial influence of teaching as well as the complex nature of instruction in the elementary school calls for a teacher whose college education is both broad and rigorous. He must be able to teach ideas and concepts from the several academic disciplines and to synthesize them on a level and in a manner which children can comprehend.

The plan of studies includes the following requirements:

General Education	88 sem. hrs.
Concentration and	
Professional Education	33 sem. hrs.
Physical Education	1 sem. hr.
Total	122 sem. hrs.

GENERAL EDUCATION: *English composition and linguistics* (6 s. h.), *Humanities* (19 s. h.), *History* (12 s. h.), *Government* (3 s. h.), *Geography* (3 s. h.), *Psychology* (3 s. h.), *Science* (12 s. h.), *Mathematics* (6 s. h.), *Electives* (24 s. h.).

CONCENTRATION AND PROFESSIONAL EDUCATION: *Elementary Education* (16 s. h.), *Philosophy* (3 s. h.), *Psychology* (6 s. h.), *Student Teaching* (8 s. h.).

*For the classes of 1968, 1969, and 1970.

BACHELOR OF SCIENCE IN EDUCATION: ELEMENTARY EDUCATION*

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En. 101	English Composition	3
Hi. 101	Western Civilization to 1700	3
Bi. 101	General Biology I	3
Ma. 101	Modern Mathematics I	3
Ar. 101	Art in Western Civilization	3
Pe. 101	Physical Education I	$\frac{1}{2}$
		15 $\frac{1}{2}$
<i>Spring Semester</i>		
En. 141	Literary Heritage I	3
Hi. 102	Western Civilization since 1700	3
Bi. 102	General Biology II	3
Ma. 102	Modern Mathematics II	3
Mu. 101	Music of Western Civilization	3
Pe. 102	Physical Education II	$\frac{1}{2}$
		15 $\frac{1}{2}$

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En. 142	Literary Heritage II	3
Mu. 111	Music Experiences I	2
Hi. 121	History of the United States to 1865	3
Py. 101	Physical Science I	3
Ps. 101	General Psychology	3
	Elective	3
		17
<i>Spring Semester</i>		
En. 143	Literary Heritage III	3
En. 221	History and Development of the English Language	3
Mu. 112	Music Experiences II	2
Hi. 122	History of the United States since 1865	3
Py. 102	Physical Science II	3
Ps. 201	Child Growth and Development	3

17

*For the classes of 1968, 1969, and 1970.

BACHELOR OF SCIENCE IN EDUCATION: ELEMENTARY EDUCATION*

JUNIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed. 311	The Teaching of Reading: Elementary School . . .	2
Ed. 312	The Teaching of Language Arts: Elementary School . . .	2
Ed. 313	The Teaching of Arithmetic: Elementary School . . .	2
Ed. 271	Educational Measurement	3
Ed. 281	Philosophy of Education	3
	Elective	3
		15

Spring Semester

Ed. 314	Instructional Materials in Selected Areas of the Elementary Curriculum	5
Ed. 315	Observation of Children: Elementary School . . .	
Ed. 451	Student Teaching: Elementary School	8
		13

SENIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed. 411	Seminar in Education	2
Ed. 412	Education of Exceptional Children	3
Ge. 101	Principles of Geography	3
Go. 101	United States Government	3
	Elective	3
		14

Spring Semester

Elective	3
Elective	3
Elective	3
Elective	3
Elective	3
	15

122 sem. hrs. required
for the B.S.Ed. degree.

*For the classes of 1968, 1969, and 1970.

BACHELOR OF SCIENCE IN EDUCATION:
EARLY CHILDHOOD EDUCATION

This degree program is planned for students who wish to teach young children, ages three to six years, in the nursery school and the kindergarten.

The plan of studies includes the following requirements:

General Education	67 sem. hrs.
Concentration in English, History, Fine Arts, Modern Languages, Mathematics, or Science	18 sem. hrs.
Professional Education	34 sem. hrs.
Health and Physical Education	3 sem. hrs.
Total	122 sem. hrs.

GENERAL EDUCATION: *English composition and linguistics* (6 s.h.), *Humanities* (16 s. h.), *History* (12 s. h.), *Government* (3 s. h.), *Psychology* (3 s. h.), *Sociology* (3 s. h.), *Science* (12 s. h.), *Mathematics* (6 s. h.), *Courses in optional choices* (6 s. h.).

CONCENTRATION IN ENGLISH, HISTORY, FINE ARTS, MODERN LANGUAGES, MATHEMATICS, OR SCIENCE: (18 s. h.).

PROFESSIONAL EDUCATION: *Early Childhood Education* (17 s. h.), *Philosophy* (3 s. h.), *Psychology* (6 s. h.), *Student Teaching* (8 s. h.).

*Inaugurated in September, 1967, with the class of 1971.

BACHELOR OF SCIENCE IN EDUCATION: EARLY CHILDHOOD EDUCATION

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En. 101	English Composition	3
Hi. 101	Western Civilization to 1700	3
Bi. 101	General Biology I	3
Ma. 101	Modern Mathematics I	3
Ar. 101*	Art in Western Civilization	3
Pe. 101	Physical Education I	½
		15½

Spring Semester

En. 141	Literary Heritage I	3
Hi. 102	Western Civilization since 1700	3
Bi. 102	General Biology II	3
Ma. 102	Modern Mathematics II	3
Mu. 101*	Music of Western Civilization	3
Pe. 102	Physical Education II	½
		15½

*Concentrators in Modern Languages take a basic language course.

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En.	Literature for Children	3
Hi. 121	History of the United States to 1865	3
Py. 101	Physical Science I	3
Mu. 111	Music Experiences I	2
Ps. 101	General Psychology	3
	Course in field of Concentration	3
		17

Spring Semester

En. 221	History and Development of the English Language	3
Hi. 122	History of the United States since 1865	3
Py. 102	Physical Science II	3
Mu. 112	Music Experiences II	2
Ps. 201	Child Growth and Development	3
	Course in field of Concentration	3
		17

BACHELOR OF SCIENCE IN EDUCATION: EARLY CHILDHOOD EDUCATION

JUNIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed.	Reading Programs for Early Childhood	2
Ed.	Art Programs for Early Childhood	2
Ed.	Music Programs for Early Childhood	2
Ed.	Health and Physical Education Programs for Early Childhood	2
Ed. 271	Educational Measurement	3
	Course in field of Concentration	3
		14

Spring Semester

Ed.	Instructional Materials in Language Arts, Arithmetic, Social Studies, and Science for Early Childhood . .	4
Ed.	Student Teaching: Nursery School, Kindergarten . .	8
		12

SENIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed.	Seminar in Childhood Education	2
Ed. 412	Education of the Exceptional Child	3
Ed. 281	Philosophy of Education	3
	*Course in field of Concentration	3
	Course in field of Concentration	3
	Course from optional choices	3
		17

Spring Semester

Go. 101	United States Government	3
So.	Home and School Relations	3
HL.	Advances in Health Sciences	2
	*Course in field of Concentration	3
	Course from optional choices	3
		14

*Concentrators in Modern Languages take Ar. 101: *Art in Western Civilization* in Fall semester and Mu. 101: *Music of Western Civilization* in Spring semester.

122 sem. hrs. required
for the B.S.Ed. degree.

BACHELOR OF SCIENCE IN EDUCATION: PRIMARY SCHOOL EDUCATION*

This degree program is designed for students who are interested in teaching children, ages six to nine years (grades one through three), in the primary school.

The plan of studies contains these requirements:

General Education	67 sem. hrs.
Concentration in English, History, Fine Arts, Modern Languages, Mathematics, or Science	18 sem. hrs.
Professional Education	34 sem. hrs.
Health and Physical Education	3 sem. hrs.
Total	122 sem. hrs.

GENERAL EDUCATION: *English composition and linguistics* (6 s.h.), *Humanities* (16 s.h.), *History* (12 s.h.), *Government* (3 s.h.), *Psychology* (3 s.h.), *Sociology* (3 s.h.), *Science* (12 s.h.), *Mathematics* (6 s.h.), *Courses in optional choices* (6 s.h.).

CONCENTRATION IN ENGLISH, HISTORY, FINE ARTS, MODERN LANGUAGES, MATHEMATICS, OR SCIENCE: (18 s.h.).

PROFESSIONAL EDUCATION: *Primary School Education* (17 s.h.), *Philosophy* (3 s.h.), *Psychology* (6 s.h.), *Student Teaching* (8 s.h.).

*Inaugurated in September, 1967, with the class of 1971.

BACHELOR OF SCIENCE IN EDUCATION: PRIMARY SCHOOL EDUCATION

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En. 101	English Composition	3
Hi. 101	Western Civilization to 1700	3
Bi. 101	General Biology I	3
Ma. 101	Modern Mathematics I	3
Ar. 101*	Art in Western Civilization	3
Pe. 101	Physical Education I	1½
		15½

Spring Semester

En. 141	Literary Heritage I	3
Hi. 102	Western Civilization since 1700	3
Bi. 102	General Biology II	3
Ma. 102	Modern Mathematics II	3
Mu. 101*	Music of Western Civilization	3
Pe. 102	Physical Education II	1½
		15½

*Concentrators in Modern Languages take a basic language course.

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En.	Literature for Children	3
Hi. 121	History of the United States to 1865	3
Py. 101	Physical Science I	3
Mu. 111	Music Experiences I	2
Ps. 101	General Psychology	3
	Course in field of Concentration	3
		17

Spring Semester

En. 221	History and Development of the English Language	3
Hi. 122	History of the United States since 1865	3
Py. 102	Physical Science II	3
Mu. 112	Music Experiences II	2
Ps. 201	Child Growth and Development	3
	Course in field of Concentration	3
		17

BACHELOR OF SCIENCE IN EDUCATION: PRIMARY SCHOOL EDUCATION

JUNIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed.	Reading in the Primary School	3
Ed.	Language Arts in the Primary School	2
Ed.	Arithmetic in the Primary School	2
Ed.	Social Studies and Science in the Primary School	2
Ed. 271	Educational Measurement	3
	Course in field of Concentration	3
		15
<i>Spring Semester</i>		
Ed.	Instructional Materials in Art, Music, Health and Physical Education in the Primary School	3
Ed.	Student Teaching: Primary School	8
		11

SENIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed.	Seminar in Childhood Education	2
Ed. 412	Education of the Exceptional Child	3
Ed. 281	Philosophy of Education	3
	*Course in field of Concentration	3
	Course in field of Concentration	3
	Course from optional choices	3
		17
<i>Spring Semester</i>		
Go. 101	United States Government	3
So.	Home and School Relations	3
Hl.	Advances in Health Sciences	2
	*Course in field of Concentration	3
	Course from optional choices	3
		14

*Concentrators in Modern Languages take Ar. 101: *Art in Western Civilization* in Fall semester and Mu. 101: *Music of Western Civilization* in Spring semester.

122 sem. hrs. required
for the B.S.Ed. degree.

BACHELOR OF SCIENCE IN EDUCATION:
MIDDLE SCHOOL EDUCATION*

This degree program is intended for students who wish to teach children, ages nine to fourteen years (grades four through eight), in the middle or intermediate school.

The plan of studies includes the following requirements:

General Education	67 sem. hrs.
Concentration in English, History, Fine Arts, Modern Languages, Mathematics, or Science	18 sem. hrs.
Professional Education	34 sem. hrs.
Health and Physical Education	3 sem. hrs.
Total	122 sem. hrs.

GENERAL EDUCATION: *English composition and linguistics* (6 s.h.), *Humanities* (13 s.h.), *History* (12 s.h.), *Government* (3 s.h.), *Geography* (3 s.h.), *Psychology* (3 s.h.), *Science* (12 s.h.), *Mathematics* (9 s.h.), *Courses in optional choices* (6 s.h.).

CONCENTRATION IN ENGLISH, HISTORY, FINE ARTS, MODERN LANGUAGES, MATHEMATICS, OR SCIENCE: (18 s.h.).

PROFESSIONAL EDUCATION: *Middle School Education* (17 s.h.), *Philosophy* (3 s.h.), *Psychology* (6 s.h.), *Student Teaching* (8 s.h.).

*Inaugurated in September, 1967, with the class of 1971.

BACHELOR OF SCIENCE IN EDUCATION: MIDDLE SCHOOL EDUCATION

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En. 101	English Composition	3
Hi. 101	Western Civilization to 1700	3
Bi. 101	General Biology I	3
Ma. 101	Modern Mathematics I	3
Ar. 101*	Art in Western Civilization	3
Pe. 101	Physical Education I	½
		15½

Spring Semester

En. 141	Literary Heritage I	3
Hi. 102	Western Civilization since 1700	3
Bi. 102	General Biology II	3
Ma. 102	Modern Mathematics II	3
Mu. 101*	Music of Western Civilization	3
Pe. 102	Physical Education II	½
		15½

*Concentrators in Modern Languages take a basic language course.

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
En.	Literature for the Middle School	4
Hi. 121	History of the United States to 1865	3
Py. 101	Physical Science I	3
Ge.	Political Geography	3
Ps. 101	General Psychology	3
	Course in field of Concentration	3
		19

Spring Semester

En. 221	History and Development of the English Language	3
Hi. 122	History of the United States since 1865	3
Py. 102	Physical Science II	3
Ps.	Developmental Psychology	3
	Course in field of Concentration	3
		15

BACHELOR OF SCIENCE IN EDUCATION: MIDDLE SCHOOL EDUCATION

JUNIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed.	Reading in the Middle School	3
Ed.	Language Arts in the Middle School	2
Ed.	Arithmetic in the Middle School	2
Ed.	Social Studies and Science in the Middle School	2
Ed. 271	Educational Measurement	3
	Course in field of Concentration	3
		15
<i>Spring Semester</i>		
Ed.	Instructional Materials in Art, Music, Health and Physical Education in the Middle School	3
Ed.	Student Teaching: Middle School	8
		11

SENIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Ed.	Seminar in Middle School Education	2
Ed. 412	Education of the Exceptional Child	3
Ed. 281	Philosophy of Education	3
	*Course in field of Concentration	3
	Course in field of Concentration	3
	Course from optional choices	3
		17
<i>Spring Semester</i>		
Go. 101	United States Government	3
Ma. 103	Modern Mathematics III	3
Hl.	Advances in Health Sciences	2
	*Course in field of Concentration	3
	Course from optional choices	3
		14

*Concentrators in Modern Languages take Ar. 101: Art in Western Civilization in Fall semester and Mu. 101: Music of Western Civilization in Spring semester.

122 sem. hrs. required
for the B.S.Ed. degree.

BACHELOR OF ARTS: BIOLOGY

Two programs are offered for students who select a concentration in **Biology**.

The first, *Plan A*, is designed for students who wish to teach biology in the public secondary schools. Such a teaching career demands that an individual be far more than a specialist in subject matter. Not only must the teacher of biology be a competent scientist, but he must also be an educated man in the sense of possessing a sound, general knowledge of broad areas of human concern. In addition, he must have a thorough understanding of the youth he is to teach and of the principles underlying competent instruction.

Plan B is designed for students whose professional objective is to engage in laboratory work in research laboratories, hospital laboratories, industrial laboratories, or to continue study for an advanced degree in the various biological disciplines.

The plan of studies includes these requirements:

	<i>Plan A</i>	<i>Plan B</i>
General Education	47	56 sem. hrs.
Modern Language	12	12 sem. hrs.
Concentration in Biology	31	31 sem. hrs.
Related fields	24	24 sem. hrs.
Professional Education	20	6 sem. hrs.
Physical Education	1	1 sem. hr.
Total	135	134 sem. hrs.

GENERAL EDUCATION: *English composition* (3 s.h.), *Humanities* (12 s.h.), *History* (9 s.h.), *Psychology* (3 s.h.), *Science* (8 s.h.), *Mathematics* (6 s.h.), *Electives* (*Plan A*, 6 s.h.; *Plan B*, 15 s.h.).

MODERN LANGUAGE: *French, German, Italian, or Spanish* (12 s.h.).

CONCENTRATION IN BIOLOGY: (31 s.h.).

RELATED FIELDS: *Chemistry* (16 s.h.), *Physics* (8 s.h.).

PROFESSIONAL EDUCATION: *Plan A: Teaching of Biology* (5 s.h.), *Philosophy* (3 s.h.), *Psychology* (6 s.h.), *Student Teaching* (6 s.h.), *Plan B: Philosophy* (3 s.h.), *Psychology* (3 s.h.).

BACHELOR OF ARTS: BIOLOGY

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
Bi. 151	Biological Sciences I	4	4
Ch. 201	General Chemistry I	4	4
Ma. 201	Mathematical Analysis I	3	3
	Modern Language	3	3
En. 101	English Composition	3	3
Pe. 101	Physical Education I	$\frac{1}{2}$	$\frac{1}{2}$
		17½	17½

Spring Semester

Bi. 152	Biological Sciences II	4	4
Ch. 202	General Chemistry II	4	4
Ma. 202	Mathematical Analysis II	3	3
	Modern Language	3	3
En. 141	Literary Heritage I	3	3
Pe. 102	Physical Education II	$\frac{1}{2}$	$\frac{1}{2}$
		17½	17½

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
Bi. 301	Invertebrate Zoology	4	4
Py. 201	Physics I	4	4
	Modern Language	3	3
En. 142	Literary Heritage II	3	3
	Elective	3	3
		17	17

Spring Semester

Bi. 302	Comparative Vertebrate Anatomy	4	4
Ch. 302	Organic Chemistry II	4	4
Py. 202	Physics II	4	4
	Modern Language	3	3
En. 143	Literary Heritage III	3	3
		18	18

BACHELOR OF ARTS: BIOLOGY

JUNIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
Bi. 311	Physiology	4	4
Bi. 321	Ecology	4	4
Hi. 101	Western Civilization to 1700	3	3
Ar. 101	Art in Western Civilization		
or			
Mu. 101	Music of Western Civilization	4	3
Ps. 101	General Psychology	4	3
Ed. 231	Observation - Participation in Biological Sciences I	1	
		18	17
<i>Spring Semester</i>			
Bi. 402	Genetics	3	3
Ch. 431	Fundamental Principles of Biochemistry	4	4
Ps. 202	Psychology of Adolescence	3	3
Hi. 102	Western Civilization since 1700	3	3
	Elective		3
Ed. 272	Educational Measurement	3	
Ed. 232	Observation - Participation in Biological Sciences II	1	
		17	16

SENIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
Bi. 421	History of Biology	2	2
Bi. 422	Principles of Evolution	2	2
Ch. 311	Analytical Chemistry		4
	Elective		3
	Elective		3
Ed. 333	The Curriculum and Teaching of Biology	3	
Ed. 463	Student Teaching of Biology: Secondary School	6	
		13	14
<i>Spring Semester</i>			
Bi. 312	Plant Physiology	4	4
Bi. 411	Microbiology	4	4
Hi. 123	United States History and Government	3	3
	Elective	3	3
Ed. 281	Philosophy of Education	3	3
		17	17

135 sem. hrs. required for
the A.B. degree, *Plan A*;
134 sem. hrs., *Plan B*.

BACHELOR OF ARTS: ENGLISH

Two programs are offered for students who select a concentration in English.

The first, *Plan A*, is for students who are interested in a career in teaching English in the public secondary schools. Teaching in the secondary school demands that an individual be far more than a specialist in subject matter. First, he must have a broad knowledge of the cultural history of man; second, he must possess a thorough background in his chosen academic field of English; and third, he must understand and be capable of assuming leadership of youth.

The second, *Plan B*, is designed for students who are interested in careers in publishing, journalism, advertising, radio and television; or who plan graduate study in English leading ultimately to a career in teaching at the college level. *No student enrolled in Plan B may elect courses in education.*

The plan of studies includes these requirements:

	<i>Plan A</i>	<i>Plan B</i>
General Education	36	36 sem. hrs.
Modern Language	12	12 sem. hrs.
Concentration in English . . .	45	45 sem. hrs.
Related fields	18	27 sem. hrs.
Professional Education	18	sem. hrs.
Physical Education	1	1 sem. hr.
Total	130	121 sem. hrs.

GENERAL EDUCATION: *English composition* (3 s.h.), *Humanities* (12 s.h.), *History* (6 s.h.), *Government* (3 s.h.), *Psychology* (3 s.h.), *Science* (6 s.h.), *Mathematics* (3 s.h.).

MODERN LANGUAGE: *French or German* (12 s.h.).

CONCENTRATION IN ENGLISH: *Linguistics* (*Plan A*, 6 s.h.; *Plan B*, 3 s.h.), *Composition and stylistics* (*Plan A*, 6 s.h.), *Literature* (*Plan A*, 30 s.h.; *Plan B*, 42 s.h.), *Directed Reading* (*Plan A*, 3 s.h.).

RELATED FIELDS: *English History* (6 s.h.), *United States History* (6 s.h.), *Electives* (*Plan A*, 6 s.h.; *Plan B*, 15 s.h.).

PROFESSIONAL EDUCATION: *Plan A only. Teaching of English* (3 s.h.), *Philosophy* (3 s.h.), *Psychology* (6 s.h.), *Student Teaching* (6 s.h.).

BACHELOR OF ARTS: ENGLISH

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
En. 101	English Composition	3	3
	Modern Language: French or German	3	3
Hi. 101	Western Civilization to 1700	3	3
Bi. 101	General Biology I	3	3
Ma. 101	Modern Mathematics I	3	3
Pe. 101	Physical Education I	$\frac{1}{2}$	$\frac{1}{2}$
		15 $\frac{1}{2}$	15 $\frac{1}{2}$
<i>Spring Semester</i>			
En. 141	Literary Heritage I	3	3
En. 161	Types of Literature	3	3
	Modern Language: French or German	3	3
Hi. 102	Western Civilization since 1700	3	3
Bi. 102	General Biology II	3	3
Pe. 102	Physical Education II	$\frac{1}{2}$	$\frac{1}{2}$
		15 $\frac{1}{2}$	15 $\frac{1}{2}$

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
En. 231	Survey of English Literature I	3	3
En. 241	Survey of American Literature I	3	3
	Modern Language: French or German	3	3
Hi. 231	History of England to 1700	3	3
Mu. 101	Music of Western Civilization	3	3
		15	15
<i>Spring Semester</i>			
En. 221	History and Development of the English Language	3	
En. 232	Survey of English Literature II	3	3
En. 242	Survey of American Literature II	3	3
	Modern Language: French or German	3	3
Hi. 232	History of England since 1700	3	3
Ps. 101	General Psychology	3	3
		18	15

BACHELOR OF ARTS: ENGLISH

JUNIOR YEAR

Fall Semester		Sem. Hrs.	
		Plan A	Plan B
En. 201	Expository Analysis	3	
En. 225	Grammar and Linguistics	3	
En. 412	Shakespeare I	3	3
En.	Elective	3	3
Hi. 121	History of the United States to 1865	3	3
Ar. 101	Art in Western Civilization	3	3
	Elective		3
		18	15
Spring Semester		Sem. Hrs.	
		Plan A	Plan B
En.	Elective		3
En.	Elective		3
Hi. 122	History of the United States since 1865	3	3
Ph. 101	Introduction to Philosophy	3	3
Ps. 202	Psychology of Adolescence	3	
Ed. 272	Educational Measurement	3	
Ed. 331	The Curriculum and Teaching of English	3	
	Elective		3
		15	15

SENIOR YEAR

Fall Semester		Sem. Hrs.	
		Plan A	Plan B
En. 261	Literature for the Adolescent	3	
En. 301	Stylistics and Composition	3	
En. 481	Directed Studies in Literature		
or			
En. 482	Directed Studies in Language Analysis	3	
En.	Elective		3
En.	Elective		3
En.	Elective		3
Ed. 461	Student Teaching of English: Secondary School	6	
	Elective*		3
	Elective		3
		15	15
Spring Semester		Sem. Hrs.	
		Plan A	Plan B
En. 221	History and Development of the English Language		3
En.	Elective	3	3
En.	Elective	3	3
Go. 101	United States Government	3	3
Ed. 281	Philosophy of Education	3	
	Elective	3	3
	Elective	3	
		18	15

*If a basic foreign language course, it must be elected for two semesters.

130 sem. hrs. required for
the A.B. degree, *Plan A*;
121 sem. hrs., *Plan B*.

BACHELOR OF ARTS: HEALTH

This degree program is designed to prepare college students for a career in an applied science concerned with man's understanding of himself in relation to health matters in a changing society. The biological, the behavioral, and the health sciences provide its foundation. Health educators are needed to bridge the gap between scientific health discoveries and man's application of these discoveries to daily life.

A career in health for the student with the Bachelor of Arts degree will provide many and varied opportunities. The health educator may select to teach at the elementary level or at the secondary level. Careers with the voluntary health organizations, as well as with local, state, and federal organizations, offer many avenues for exciting work. In addition, opportunities at the international level are becoming more numerous.

The plan of studies includes the following requirements:

General Education	44 sem. hrs.
Modern Language	12 sem. hrs.
Concentration in Health	41 sem. hrs.
Related fields	16 sem. hrs.
Professional Education	20 sem. hrs.
Physical Education	1 sem. hr.
Total	134 sem. hrs.

GENERAL EDUCATION: *English composition* (3 s.h.), *Humanities* (12 s.h.), *Government* (3 s.h.), *Psychology* (3 s.h.), *Sociology* (3 s.h.), *Science* (8 s.h.), *Mathematics* (6 s.h.), *Electives* (6 s.h.).

MODERN LANGUAGE: *French, German, Italian, or Spanish* (12 s.h.).

CONCENTRATION IN HEALTH: (41 s.h.).

RELATED FIELDS: *Biology* (4 s.h.), *Chemistry* (12 s.h.).

PROFESSIONAL EDUCATION: *Health Curriculum* (3 s.h.), *Teaching of Health* (2 s.h.), *Philosophy* (3 s.h.), *Psychology* (6 s.h.), *Student Teaching* (6 s.h.).

BACHELOR OF ARTS: HEALTH

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Bi. 151	Biological Science I	4
Ch. 201	General Chemistry I	4
Ma. 201	Mathematical Analysis I	3
	Modern Language	3
En. 101	English Composition	3
Pe. 101	Physical Education I	½
		17½

Spring Semester

Bi. 152	Biological Science II	4
Ch. 202	General Chemistry II	4
Ma. 202	Mathematical Analysis II	3
	Modern Language	3
En. 141	Literary Heritage I	3
Pe. 102	Physical Education II	½
		17½

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Bi. 201	Human Anatomy and Physiology I	4
Ch.	Organic and Biochemistry	4
	Modern Language	3
En. 142	Literary Heritage II	3
Ps. 101	General Psychology	3
		17

Spring Semester

Hl. 201	Foundations for Health	3
Bi. 202	Human Anatomy and Physiology II	4
	Modern Language	3
En. 143	Literary Heritage III	3
Ar. 101	Art in Western Civilization	
or		
Mu. 101	Music of Western Civilization	3
		16

BACHELOR OF ARTS: HEALTH

JUNIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Hl. 211	Current Problems in Safety and First Aid	3
Hl. 303	Kinesiology	3
Hl. 331	The School Health Program	3
	Elective	3
Ps. 202	Psychology of Adolescence	3
Ed. 272	Educational Measurement	3
		18
<i>Spring Semester</i>		
Hl. 307	Evolving Patterns of Community Health	3
Hl. 311	Nutrition	3
Hl. 321	Observation of Health Education	
Hl.	Elective	3
So.	Sociology	3
	Elective	3
Ed. 342	The Health Curriculum	3
		18

SENIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Hl. 409	Contemporary World Health Problems	3
Ed. 343	The Teaching of Health	2
Ed. 471	Student Teaching: Health	6
		11
<i>Spring Semester</i>		
Hl. 401	Field Work in Health	3
Hl. 402	Health Seminar	3
Hl. 407	Organization and Administration of Health Programs	3
Hl. 408	Guided Observation Practices	
Bi. 411	Microbiology	4
Hi. 123	United States History and Government	3
Ed. 281	Philosophy of Education	3
		19

134 sem. hrs. required
for the A.B. degree.

BACHELOR OF ARTS: HISTORY

Two programs are offered for students who select a concentration in history.

The first, *Plan A*, is for students who have a strong interest in history and who want a teaching career in it in the public secondary schools. Teaching in the secondary school calls for far more than a specialized knowledge of history. Such a teacher must not only have a thorough knowledge of his academic field but he must also have a broad understanding of the cultural history of man. In addition, he must possess an objective understanding of youth and a sound knowledge of those principles basic to competent teaching.

The second, *Plan B*, is designed for students who are interested in careers in government administration, public service, foreign service, journalism, or who wish to prepare for advanced study in law or college teaching.

The plan of studies includes the following:

	<i>Plan A</i>	<i>Plan B</i>
General Education	39	39 sem. hrs.
Modern Language	12	12 sem. hrs.
Concentration in History	39	48 sem. hrs.
Related fields	12	24 sem. hrs.
Professional Education	21	sem. hrs.
Physical Education	1	1 sem. hr.
Total	124	124 sem. hrs.

GENERAL EDUCATION: *English composition* (3 s.h.), *Humanities* (21 s.h.), *Government* (3 s.h.), *Geography* (3 s.h.), *Psychology* (3 s.h.), *Science or Mathematics* (6 s.h.).

MODERN LANGUAGE: *French, German, Italian, or Spanish* (12 s.h.).

CONCENTRATION IN HISTORY: (*Plan A*, 42 s.h.; *Plan B*, 48 s.h.).

RELATED FIELDS: *Sociology* (6 s.h.). *Electives* (*Plan A*, 6 s.h.; *Plan B*, 18 s.h.).

PROFESSIONAL EDUCATION: *Plan A only. Teaching of History* (6 s.h.), *Philosophy* (3 s.h.), *Psychology* (6 s.h.). *Student Teaching* (6 s.h.).

BACHELOR OF ARTS: HISTORY

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
Hi. 101	Western Civilization to 1700	3	3
	Modern Language	3	3
En. 101	English Composition	3	3
Bi. 101	General Biology I		
or			
Ma. 101	Modern Mathematics I	3	3
Ge. 101	Principles of Geography	3	3
Pe. 101	Physical Education I	½	½
		15½	15½
<i>Spring Semester</i>			
Hi. 102	Western Civilization since 1700	3	3
	Modern Language	3	3
En. 141	Literary Heritage I	3	3
Ar. 101	Art in Western Civilization		
or			
Mu. 101	Music of Western Civilization	3	3
Bi. 102	General Biology II		
or			
Ma. 102	Modern Mathematics II	3	3
Pe. 102	Physical Education II	½	½
		15½	15½

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
Hi. 211	Europe in Transition: 1300-1648	3	3
Hi. 221	American Colonial History	3	3
Hi. 481	Historiography	3	3
	Modern Language	3	3
En. 142	Literary Heritage II	3	3
Ps. 101	General Psychology	3	3
		18	18
<i>Spring Semester</i>			
Hi. 212	The Old Regime and Revolution: 1648-1815	3	3
Hi. 222	The National Period	3	3
	Modern Language	3	3
En. 143	Literary Heritage III	3	3
Ph. 101	Introduction to Philosophy	3	3
		15	15

BACHELOR OF ARTS: HISTORY

JUNIOR YEAR

		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
<i>Fall Semester</i>			
Hi. 311	Europe in the Nineteenth Century	3	3
Hi. 321	United States in Mid-Nineteenth Century	3	3
Hi.	Elective	3	3
So.	Sociology I	3	3
Go. 101	United States Government	3	3
Ps. 101	Psychology of Adolescence	3	
		18	15
<i>Spring Semester</i>			
Hi. 312	Europe in the Twentieth Century	3	3
Hi. 322	United States in the Twentieth Century	3	3
So.	Sociology II	3	3
Ed. 272	Educational Measurement	3	
Ed. 281	Philosophy of Education	3	
	Elective		3
	Elective		3
		15	15

SENIOR YEAR

		<i>Sem. Hrs.</i>	
		<i>Plan A</i>	<i>Plan B</i>
<i>Fall Semester</i>			
Hi.	Elective		3
Hi.	Elective		3
Hi.	Elective		3
Ed. 332	The Curriculum and Teaching of History	3	
Ed. 421	Human Relations and Education	3	
Ed. 462	Student Teaching of History: Secondary School	6	
	Elective		3
	Elective		3
		12	15
<i>Spring Semester</i>			
Hi. 471	Ideology and World Affairs	3	3
Hi. 492	Reading Seminar in United States History	3	3
Hi.	Elective	3	3
	Elective	3	3
	Elective	3	3
		15	15

124 sem. hrs. required for
the A.B. degree, *Plan A*
and *Plan B*.

BACHELOR OF MUSIC EDUCATION

This degree program is offered for men and women who wish to teach and supervise music in the public elementary and secondary schools. Concentration in this field presupposes aptitude and interest in music. Though the teacher of music is concerned with a specialized area of knowledge, it is highly important that he possess a broad cultural background. This he needs not only as an educated person but also as a teacher who must view the teaching of music within a broad context of knowledge and human experience.

The plan of studies includes the following requirements:

General Education	42 sem. hrs.
Concentration in Music . . .	57 sem. hrs.
Professional Education . . .	30 sem. hrs.
Physical Education	1 sem. hr.
Total	130 sem. hrs.

GENERAL EDUCATION: *English composition* (3 s.h.), *Humanities* (18 s.h.), *History* (6 s.h.), *Psychology* (3 s.h.), *Science* (3 s.h.), *Mathematics* (3 s.h.), *Electives* (6 s.h.).

CONCENTRATION IN MUSIC: *Music Theory* (18 s.h.), *Applied Music* (39 s.h.).

PROFESSIONAL EDUCATION: *Teaching and Supervision of Music* (13 s.h.), *Philosophy* (3 s.h.), *Psychology* (6 s.h.), *Student Teaching* (8 s.h.).

BACHELOR OF MUSIC EDUCATION

FRESHMAN YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Mu. 201	Sight Singing and Dictation I	2
Mu. 211	Fundamentals of Music	1
Mu. 221	Instrumental Class: String	2
Mu. 241	Functional Piano	1
Mu. 261	Ensemble: Vocal	½
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
En. 101	English Composition	3
Ar. 101	Art in Western Civilization	3
Hi. 111	Modern European History	3
Pe. 101	Physical Education I	½
		17½
<i>Spring Semester</i>		
Mu. 202	Sight Singing and Dictation II	2
Mu. 212	Introduction to Harmony	1
Mu. 222	Instrumental Class: Woodwind	2
Mu. 242	Functional Piano	1
Mu. 261	Ensemble: Vocal	½
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
En. 141	Literary Heritage I	3
Ma. 101	Modern Mathematics I	3
Ps. 101	General Psychology	3
Pe. 102	Physical Education II	½
		17½

SOPHOMORE YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Mu. 151	Music History and Literature I	3
Mu. 203	Advanced Sight Singing and Dictation I	1
Mu. 213	Diatonic Harmony	2
Mu. 231	Elementary Conducting	3
Mu. 223	Instrumental Class: Brass	2
Mu. 243	Functional Piano	1
Mu. 261	Ensemble: Vocal	½
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
En. 142	Literary Heritage II	3
		17
<i>Spring Semester</i>		
Mu. 152	Music History and Literature II	3
Mu. 204	Advanced Sight Singing and Dictation II	1
Mu. 214	Chromatic Harmony	2
Mu. 224	Instrumental Class: Percussion	2
Mu. 224	Functional Piano	1
Mu. 261	Ensemble: Vocal	½
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
Ps. 203	Psychology of Childhood and Adolescence	3
En. 143	Literary Heritage III	3
		17

BACHELOR OF MUSIC EDUCATION

JUNIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Mu. 311	Orchestration	3
Mu. 331	Advanced Choral Conducting	3
Mu. 332	Vocal and Choral Techniques	3
Mu. 245	Functional Piano	1
Mu. 261	Ensemble: Vocal	
or		
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
Ed. 251	Workshop in Education	3
Mu. 381	Music in the Elementary School	3
		17½
<i>Spring Semester</i>		
Mu. 321	Instrumental Conducting	2
Mu. 451	Major Performance: Recital Class I	
Mu. 246	Functional Piano	1
Mu. 261	Ensemble: Vocal	
or		
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
Mu. 382	Music in the Secondary School	2
Mu. 384	Instrumental Music in the Schools	2
Mu. 491	Student Teaching: Music, Elementary School	4
		12½

SENIOR YEAR

<i>Fall Semester</i>		<i>Sem. Hrs.</i>
Mu. 452	Major Performance: Recital Class II	
Mu. 261	Ensemble: Vocal	
or		
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
Ed. 272	Educational Measurement	3
Ed. 281	Philosophy of Education	3
Mu. 492	Student Teaching: Music, Secondary School	4
	Elective	3
		14½
<i>Spring Semester</i>		
Mu. 316	18th Century Counterpoint	3
Mu. 261	Ensemble: Vocal	
or		
Mu. 262	Ensemble: Instrumental	½
Mu. 263	Applied Music	1
Mu. 391	Supervision of Music Education	3
Hi. 123	United States History and Government	3
Sc. 101	Survey of Selected Topics in Science	3
	Elective	3
		16½

130 sem. hrs. required
for the B.Mus.Ed. degree.

BACHELOR OF SCIENCE: NURSING

This degree program is designed for students who are interested in a career in professional nursing. The program includes study in the humanities, the biological and physical sciences, and the behavioral sciences. These serve as a foundation for the specialized studies and clinical aspects of the program. Clinical nursing experiences are provided in collaboration with three hospitals in Lowell: the Lowell General Hospital, St. John's Hospital, and St. Joseph's Hospital. It is anticipated that additional clinical experiences will be available at the Mental Health Center in Lowell.

The Bachelor of Science degree, which is awarded when the student completes the program of study successfully, qualifies its recipient for the examinations administered by the Massachusetts Board of Registration in Nursing. Upon successful performance in these examinations, the candidate achieves professional and legal status as a registered nurse. This degree program is also basic for specialization at the graduate level in nursing education, supervision, or administration.

As authorized by the Board of Trustees of the Massachusetts State Colleges and by the Massachusetts Board of Higher Education, this baccalaureate program will be inaugurated in September, 1968. Secondary school seniors may submit applications for admission in the 1967-68 academic year.

ADMISSION POLICIES

The admission policy of the college is selective in nature and is directed toward securing men and women who show evidence of possessing the capacity and desire for intellectual growth and who present reasonable assurance that they will pursue successfully the degree program of their choice.

In evaluating candidates, the following criteria are considered: the high school academic record, and the recommendation of the principal or guidance director; the scores obtained on the Scholastic Aptitude and Achievement Tests of the College Entrance Examination Board; information gained from a personal interview; and the medical and health report of the candidate's personal physician and of the college physician.

ADMISSION REQUIREMENTS

Every applicant for admission is required to take the College Entrance Examination Board Scholastic Aptitude Test and three Achievement Tests. The candidate should direct the Board to report his scores to the *Director of Admissions* of this college.

The College Entrance Examination Board Tests required for admission to the various degree programs are:

Bachelor of Science in Education: Elementary Education: Scholastic Aptitude Test and Achievements Tests in English and in two other subjects selected by the candidate.

Bachelor of Arts: English: Scholastic Aptitude Test and Achievement Tests in English, French, and one other subject selected by the applicant.

Bachelor of Arts: History: Scholastic Aptitude Test and Achievement Tests in English, History, and one other subject selected by the applicant.

Bachelor of Arts: Biology: Scholastic Aptitude Test and Achievement Tests in English, Biology, and Mathematics.

Bachelor of Arts: Health: Scholastic Aptitude Test and Achievement Tests in English, Biology, and one other subject selected by the applicant.

Bachelor of Music Education: Scholastic Aptitude Test and Achievement Tests in English and one other subject selected by the applicant. In lieu of the third achievement test, applicants are required to take a Music Aptitude Test and demonstrate ability in music. This test is administered at the college on several dates during the academic year. Details in regard to this test and the dates on which it is given may be obtained from the *Director of Admissions*.

Bachelor of Science: Nursing: Scholastic Aptitude Test and Achievement Tests in English, Biology, and Chemistry.

To be eligible for admission, an applicant must have completed a high school course of study leading to a diploma, or its equivalent preparation. He must have completed sixteen units accepted by the high school in fulfillment of its graduation requirements or must present evidence of equivalent preparation. These sixteen units must include the following: English (through grade twelve), four units; American history and government, one unit; algebra, one unit; geometry, one unit; and biology or physics or chemistry, one unit. In addition, a candidate applying for admission to a program leading to a Bachelor of Arts degree must present at least two units in a foreign language.

The sixteen units must be so distributed that the number offered, including the prescribed units, shall not be more than four units in any of the following fields: English, social studies, mathematics, science; not be more than seven units in foreign languages (no credit for less than two units of any one language); not be more than two units in any of the following fields: fine arts, business subjects, industrial arts, home economics. One additional unit beyond the maximum stated may be granted in music to applicants for admission to the program leading to the Bachelor of Music Education degree.

With these requirements, an academic evaluation is made of the high school record and the score on the Scholastic Aptitude Test. On the high school record, a grade of *A* is equated four points; *B*, three points; *C*, two points; and *D*, one point. An applicant must have a successful record on the Scholastic Aptitude Test and on the Achievement Tests of the College Entrance Examination Board. Candidates who meet these criteria are admitted provided they also meet the requirements listed below.

The candidate for admission must be in good health and in satisfactory physical condition. A statement from the applicant's personal physician and a report of a medical examination by the college physician must be submitted.

Data relative to personal characteristics and moral character are required and must warrant the admission of the applicant. A personal

interview by college faculty members is required of each candidate. The results of this interview and the recommendation of the high school principal or guidance director are considered in determining the fitness of the applicant.

If the number of applicants qualified for admission exceeds the number that the facilities of the college will accommodate, a waiting list is established. The position of a candidate on the waiting list is determined by the academic evaluation described below. Vacancies are filled from the established list. A new waiting list is compiled after each administration of the College Entrance Examination Board tests.

PROCEDURES FOR ADMISSION

A candidate must observe the following procedures in applying for admission. All credentials should be sent to the *Director of Admissions*.

Application for admission must be made on a form provided by the college. A transcript of the applicant's high school record, including at least the first quarter of the senior year, on a form entitled *High School Record* which includes ratings of personal characteristics should be sent directly by the high school principal or guidance director. Records submitted by candidates themselves are not considered official.

The applicant must take the College Entrance Examination Board Scholastic Aptitude Test and the three required Achievement Tests, preferably by March of the senior year. The Board reports the test scores directly to the college. Detailed information concerning the tests and the dates throughout the year on which they are given may be secured from the *Director of Admissions*, the high school principal or guidance director, or directly from Educational Testing Service, Princeton, New Jersey.

Following receipt of the application form, transcript of the high school record, and scores on the Scholastic Aptitude and Achievement Tests, the *Director of Admissions* arranges an appointment for the personal interview of the applicant.

Upon notification of acceptance of admission, a candidate is required to pay the registration fee of \$20.00 within fifteen days. This fee reserves a place in the class. In fairness to qualified applicants on the waiting list, a reservation cannot be made for an accepted candidate who fails to pay the registration fee.

After an applicant has been officially notified that he has been accepted for admission, he is required to submit the statement of his health and physical condition completed by his personal physician.

ADMISSION TO ADVANCED STANDING

Applicants for admission to advanced standing and seeking transfer of credits from other colleges and universities must meet the general admissions requirements and must submit official transcripts and letters of recommendation from the deans of all post-secondary institutions attended.

This college in conjunction with all Massachusetts State Colleges, is pleased to facilitate the orderly transfer of qualified associate degree recipients from Massachusetts Community Colleges into upper level baccalaureate programs. The Massachusetts State Colleges offer a variety of baccalaureate degree programs with varied admission and degree requirements as determined by the college granting the degree. Associate degree recipients seeking transfer to baccalaureate degree programs must meet the admission and retention requirements of the specific programs in the State College of their choice. As a prerequisite for continued accreditation, The National Council for Accreditation of Teacher Education demands that standards of screening for admission to upper level professional teacher preparation programs be higher and more selective than standards for admission to lower level studies or to upper level general education programs.

Complete transcripts and a letter of recommendation from the dean of his college must be provided by each applicant following graduation from a Massachusetts Community College. Personal interviews may be required of all qualified applicants. The number of transfers accepted will be determined by existing vacancies in the various degree programs in the State Colleges. Final admission will be based upon the record of each individual applicant as of July first of the transfer year. Transfer of qualified candidates from Massachusetts Community Colleges will be facilitated through agreements determined by cooperative working arrangements between the Massachusetts State Colleges and the Massachusetts Community Colleges. The State Colleges will accept credits of C or better earned in equal or comparable courses of study at the Community Colleges, such equality or comparability to be determined by the relevant departmental chairman in the State College.

ADMISSION TO PROFESSIONAL EDUCATION

Admission of a student to the *Professional Education* program of any curriculum is based upon an evaluation of his academic record and other criteria.

Admission of a student to a course in *Student Teaching* is determined by the following regulation. The Faculty Committee on Academic Standards requires a student to achieve a cumulative grade-point average of not less than 2.0 in his field of concentration as a prerequisite for admission to the course in student teaching. No student may be admitted to said course unless he meets this prerequisite both at the end of the semester immediately preceding and at the time of admission to the course.

ACADEMIC POLICIES

GRADING SYSTEM

The college is organized on the semester basis. Credits earned for successful completion of a course are expressed in semester hours. One semester hour means approximately one hour of class work and two hours of preparation per week (laboratory and similar courses are an exception).

The quality of the student's work in a course is officially recorded by a letter grade of *A*, *B*, *C*, *D*, or *F*.

A grade of *A* indicates that the quality of the work done by the student is superior. *B* indicates work which has distinction. *C* indicates work which is satisfactory. *D* indicates work which is passing but unsatisfactory. *F* means failure for the course.

An *incomplete* grade can be assigned only to a course in which the final examination has been missed for a valid reason. A final grade, to eradicate the *incomplete* status, must be filed with the Academic Dean no later than one month after the date on which the succeeding semester begins, or a grade of *F* will be recorded for the course. Responsibility for removal of the *incomplete* status rests with the student; he must arrange with the instructor for completion of the course.

At the end of each semester, a report of the grades received in the several courses is mailed to the student.

ACADEMIC STANDING

Academic standing and eligibility for a degree are determined by the quality of the student's work. To ascertain the student's academic standing, the college uses a point system. In this system, each letter grade has an equivalent numerical value in points. Thus, a grade of *A* has an equivalent of 4 points; a grade of *B*, 3 points; a grade of *C*, 2 points; a grade of *D*, 1 point; and a grade of *F*, 0 points. This system makes it possible to average a student's grades at the end of a semester or a year and to determine his grade-point average.

The grade-point average is an index of the overall quality of a student's academic achievement. To maintain a satisfactory academic standing, a student must achieve a grade-point average of 1.0 or higher at the end of the first semester of the freshman year; a 1.5 at the end of the freshman year; a 1.75 at the end of the sophomore year; a 2.0 at the end of the junior year and of the senior year. He must also achieve a four-year cumulative grade-point average of 2.0 or higher to be eligible for a degree.

Students who do not achieve the required grade-point average stated above, either at the end of the first semester of the freshman year or at the end of any year are dismissed from the college for inadequate scholarship.

COURSE DEFICIENCIES

To remain in good academic standing, a student must not only maintain the required grade-point average or higher but must also pass every course. When a student receives a failure in any course, the grade of *F* can never be removed from the record. If the failure occurs in a prescribed course, he must repeat and pass it. The course must be taken in an approved summer session or, when possible, during the regular academic year. Prerequisite courses, in which *F* grades have been received, must be repeated and passed before the student may take advanced work.

The grade for a repeated course will be recorded in the college records as follows: *Repeated* (name of course) *passed at* (name of college) *with a grade of* . . .

The grade-point average achieved at the end of any semester or year is not affected by grades in courses subsequently repeated and passed.

ACADEMIC HONORS

The Dean's List honors by citation thereon those students whose academic achievement merits recognition. It is issued at the end of each semester. To qualify, a student must attain an average of *B* (a grade-point average of 3.0) or higher for the semester.

Honors are awarded at commencement to degree recipients whose scholarship merits citation. Their degrees are conferred *summa cum*

laude, *magna cum laude*, or *cum laude*, and a symbolic gold key is presented to each recipient of an honors degree.

DEGREE REQUIREMENTS

In order to qualify as a candidate for the A.B., B.S.Ed., or B.Mus.Ed. degree, a student must comply with the following regulations. He must:

Complete all the requirements of the degree curriculum in which he is registered, not only in terms of the semester hour credits but also of the courses required in that curriculum.

Achieve the academic standing and grade-point average or higher required both for each year and cumulatively for the four years, and pass every course required for the degree.

Fulfill the residence requirement of at least one year of full-time study (a minimum of thirty semester hours) and be in residence in the academic year immediately preceding the commencement at which the degree is to be conferred.

Discharge in full all financial obligations to the college.

WITHDRAWAL FROM THE COLLEGE

Students desiring to withdraw from the college are required to have a conference with the Academic Dean. If, for any reason, this is not possible, the student must submit a written notification of withdrawal. Notice of withdrawal is required in order that the student's permanent record may be properly completed. When withdrawal occurs during the semester, failure to comply with this regulation will mean that a failing grade for every course in which the student is enrolled will be entered on the official record.

PERSONNEL SERVICES

While the primary concern of the college is to provide an effective intellectual environment for the student, it subscribes to the belief that other facets of the individual's development are of equal importance. It is aware of its obligation to assist in the growth of the student as a person and to provide services which contribute to such development.

COUNSELING

The counseling of students in both academic and personal problems is the particular responsibility of the Academic Dean and the Dean of Women. Emphasis is placed on assisting the student to become a stable, mature person capable of analyzing his problems objectively and of making intelligent decisions.

A planned program assists freshman students in becoming oriented to academic and social life at the college. This is initiated during Freshman Week which precedes the opening of the academic year. At this time, entering students become acquainted with the campus, their fellow students, and the general environment of the college. They also take placement tests and attend conferences. The Student Government Association assists by providing social and recreational functions and by discussing student activities, privileges, and responsibilities.

STUDENT HEALTH SERVICES

The health of the students is the responsibility of the college medical adviser, a registered nurse, and members of the college health department. The purpose of this service is to provide as fully as possible on the campus educational health guidance and preventive health screening tests and services to all students, and medical attention in the event of an emergency. It in no way assumes the function of the student's personal physician or the responsibility of the parents for the health and medical care of the student. Hospitalization or medical treatment is obtained for the student only upon the permission and at the expense of the parent. All students are required to have a physical examination

by the college medical adviser every year. When the presence of a physical anomaly is revealed, students are advised in regard to the need for medical attention.

RESIDENT LIVING

Resident student living facilities include a residence hall for women, on the campus, and approved rooms in private homes off-campus. Men and women students are permitted to live only in those private residences which have been approved by the college. The selection of and financial agreement for off-campus housing is the personal responsibility of the student.

Women students living in the residence hall on the campus are under the general jurisdiction of the Dean of Women. They elect their own governing council the purpose of which is to establish policies and plan activities which will aid group living and promote the personal and social development of residents.

PLACEMENT SERVICES

The college maintains a Placement Office which disseminates information on positions available in teaching. Its purpose is to assist seniors in locating teaching positions and to be of service to officials of school systems seeking teaching personnel. Pertinent records and information are kept on all seniors who are candidates for degrees in teaching. Interviews are arranged between these students and representatives of public school systems. This office also provides information regarding graduate study, and graduate fellowships and scholarships.

STUDENT ACTIVITIES

Academic work is supplemented by a variety of extracurricular activities which contribute significantly to college life. These activities provide opportunity for recreation, expression of special interests, and the development of individual talents which might otherwise lie dormant. They also offer experiences in working with others and in acquiring qualities of leadership.

Education comes not only from academic learning; it comes also from association with other students in situations which encourage independence, tolerance, and respect for the individual, essential attributes in a democratic society.

STUDENT GOVERNMENT ASSOCIATION

This assembly includes all students in the college. Its purpose is to promote self-government among its members, to provide for their diverse interests, and to develop awareness of their individual responsibilities as members of a college community.

The governing body is the Student Council, consisting of officers, elected by the entire student body, and representatives from each class. It meets weekly to conduct its business and supervise its program. The responsibilities of the Council include the allocation and the management of student finances, the development of policies relating to student welfare, and the planning, organizing, and coordinating of all student activities.

CAMPUS BOOKSTORE

A bookstore is operated for the convenience of students. It is located in the basement of the Education Building.

PUBLICATIONS

THE ADVOCATE. The college newspaper is edited and managed by students who are interested in journalism. It is published bi-weekly to inform students of campus events and other matters of interest to them and to serve as a medium for the expression of student opinion.

PEGASUS. The college literary magazine is published semi-annually. Its purpose is to encourage students to participate in the arts of creative thinking and creative writing. The material selected for publication is chosen from art, poetry, fiction, non-fiction, music, or photography submitted by students and faculty.

THE KNOLL. Published annually, the college yearbook is planned and directed by students. Its purpose is to produce a book of such quality as befits the permanent record of the senior class and of the events and activities that have taken place on and off the campus during the academic year.

DRAMATICS

DRAMA CLUB. This organization offers opportunities for expression through the dramatic arts. Experiences in staging, lighting, and costuming, as well as performing, are available. It presents a variety of dramatic productions throughout the academic year.

MUSICAL ACTIVITIES

M. E. N. C. This is a student chapter of the Massachusetts Music Educators Association, affiliate of the Music Educators National Conference. Membership in this organization entitles one to a subscription of the Music Educators Journal. Members of this organization are active on the campus in college functions and in music conferences at the state and national levels. Each year, they present a major musical production.

JAZZ SOCIETY. Composed of students who are enthusiasts, this organization furthers music self-expression and presents jazz, concert-style, in private and public performances. It seeks to acquaint its members, both performing and associate, with a discriminating recognition of jazz, and to aid performing members in skillful rendition.

SPORTS ACTIVITIES

A broad program of intramural and individual sports provides opportunities for recreational participation by all students. This program exists for the benefit of the student and for the contribution it can make to his educational experience. Two organizations sponsor such a program for men and women respectively.

MEN'S ATHLETIC ASSOCIATION. The program which this organization offers includes a variety of intramural sports. Its members may participate in basketball, touch football, handball, volleyball, badminton, bowling, and golf. In addition, sports nights and social activities are sponsored by the group.

VARSITY SPORTS. A program of varsity sports for men students is also sponsored by the Men's Athletic Association. There are varsity teams in basketball, baseball, and wrestling. The intercollegiate competition in these sports is undertaken on a home-and-away basis with a number of colleges in New England.

WOMEN'S RECREATIONAL ORGANIZATION. Recreational activities are the essence of the program. Its purpose is to promote a high standard of wholesome living and sportsmanship, and a permanent interest in physical recreation. The emphasis is on playing rather than on winning, and upon intra-competition rather than on inter-competition. The recreational and sports program includes badminton, basketball, softball, volleyball, bowling, swimming, tennis, golf, and modern dance. A variety of social and recreational activities are also part of its diversified program.

RELIGIOUS ACTIVITIES

IONA FELLOWSHIP. The purpose is to provide for the spiritual needs of Protestant students united in a common desire to realize a full and creative life through a growing knowledge of God. This the members seek to achieve through worship, study, and action.

Meetings are held monthly in a local church under the direction of a chaplain. Membership is also open to students at Lowell Technological Institute.

HILLEL SOCIETY. This organization serves the needs of Jewish students in the college community. Joint meetings with students of Lowell Technological Institute are held regularly.

NEWMAN CLUB. Designed to promote the spiritual needs of Catholic students and at the same time to extend their intellectual and social interests.

Joint meetings with the students of Lowell Technological Institute are held monthly under the direction of a chaplain. A planned program of lectures and discussion by the spiritual adviser and guest speakers is carried on throughout the academic year.

PHANAR CLUB. The name Phanar literally means a light or beacon. Membership in this group is open to Eastern Orthodox students from colleges in the Lowell area. Its purpose is to foster the spiritual and intellectual growth of its members and to help them achieve a fuller life through the perpetuation of Christian precepts.

Lectures and discussion by the spiritual advisers or guest speakers are provided at the monthly meetings.

FEES AND EXPENSES

TUITION FEE

The tuition fee is \$200.00 per academic year for students who are registered for full-time study and who are legal residents of Massachusetts.

For students who are studying on a full-time basis and who are non-residents of Massachusetts, the tuition is \$600.00 per year.

Students who are residents of Massachusetts and who are studying on a part-time basis pay a tuition fee for each course of \$7.00 per semester hour. Non-residents of the state in the same category are assessed a tuition fee of \$21.00 per semester hour.

REGISTRATION FEE

Each applicant for admission to the college must pay a registration fee of \$20.00 within fifteen days following notification of acceptance of admission. This fee is not refundable, but is applied to the tuition fee of students who register.

STUDENT ACTIVITIES FEE

Every student is required to pay an activities fee of \$35.00 per year. This fee is not refundable. Payment of the activities fee automatically confers membership in the Student Government Association. The treasurer of the Student Council is in charge of the collection of this fee. This fee is used for the financial support of student publications, recreational activities, varsity sports, and all social activities sponsored by the Student Government Association.

RESIDENCE FEE

The cost of living in the college dormitory includes two fees, the room charge and the meal charge. The room charge is \$300.00 for the academic year.

The student has three options relative to the meal charge. For a five-day week (fifteen meals), the meal charge is \$170.00 per semester (seventeen weeks) or \$340.00 for the academic year. For a seven-day week (twenty-one meals), the meal charge is \$221.00 per semester (seventeen weeks) or \$442.00 for the academic year. For the third option, the student may purchase a meal card in advance. This card has an exact value of \$50.00 and is used to purchase meals at regular prices. It is non-transferable and is used only by the student for whom it is purchased. Any unused portion of this meal card will be submitted for reimbursement at the end of the academic year only.

Each applicant for a residence hall reservation must pay a deposit of \$25.00 within fifteen days of notification of admission to the residence hall. This deposit is credited toward the first bill for room charge and is not refundable if the student fails to register.

MUSIC ACTIVITIES FEE

Students enrolled in the B.M.Ed. degree program are required to pay a fee of \$60.00 per semester for individual private instruction in applied music.

PAYMENT OF FEES

Students will be permitted the privilege of attending classes and use of the college facilities only after they have cleared their financial obligations, or have made satisfactory arrangements for payment.

All fees are payable in advance, on or before the day of registration for each semester. The tuition fee is payable in two installments. Students, residents of Massachusetts, registered for full-time study must pay \$100.00 at the beginning of each semester. Those who live outside of Massachusetts must pay \$300.00 per semester. Students studying on a part-time basis pay in accordance with the schedule outlined above.

The student activities fee of \$35.00 is payable in full in September on the day of registration for the first semester.

The residence fees are payable as follows. The room charge is paid in three installments: \$25.00 deposit; \$125.00 on the day of registration in September, and \$150.00 on the day of registration for the second semester. The meal charge is paid semi-annually, on the day of registration in each semester.

The music activities fee of \$60.00 per semester, for students enrolled in the B.M.Ed degree program, is payable on or before the day of registration for each semester.

Checks or money orders in payment of the tuition fee, the registration fee, and the residence room fee must be made payable to *State College at Lowell*. Payment for the student activities fee must be made payable to *Student Activities Fund, State College at Lowell*; checks for the residence meal fee must be made payable to the appropriate food service corporation; and checks for the music activities fee must be made payable to *Music Activities Fee, State College at Lowell*.

REFUNDS

Refunds for students withdrawing from the college within six weeks after the beginning of the semester will be based on the regularly established schedule of refunds, minus the registration fee and the activities fee.

OTHER EXPENSES

There are additional expenses for which the student should plan in estimating his total expenses for each year. These include the cost of textbooks at approximately \$100.00 per year, a regulation attire for physical education at approximately \$20.00 (purchased in the freshman year), class fees, and social activities. Non-resident students (those who commute to the college) should also include an estimate of expenses for noon meals and for daily transportation.

COURSES OF INSTRUCTION

Each of the course offerings described below is designated by two letters and a number. The letters preceding each number identify the subject of any given course, e.g., *En* for English.

The number indicates the scope and relative degree of specialization within a discipline, e.g.

101 - 149: A course designed to provide an introduction to a subject *for the non-specialist in that field* and, ordinarily, to meet requirements in general education.

151 - 199: A course which provides an introduction to a subject *for the concentrator in that field* and meets requirements in general education, *or* a basic introductory course in a language.

200 - 299: A systematic course, restricted in scope, required of a concentrator in that or a related field, *or* an intermediate level course in a language.

300 - 399: An advanced course concerned with a specialized aspect of a field and which ordinarily has at least one prerequisite.

400 - 499: An advanced course which provides intensive study of a selected topic within a field. Seminars and courses in student teaching are also in this category.

DEPARTMENT OF BEHAVIORAL SCIENCES

Chairman: DR. KOLACK, *Associate Professor*

Professor: DR. GILLIGAN

Assistant Professor: T. NORRIS; A. SCRUGGS

Instructor: S. CHAPIN; F. KRELL

Ps. 101. GENERAL PSYCHOLOGY

A study of the dynamics of human behavior, including such factors as perception, emotion, motivation, personality, and social relations.

MEMBERS OF THE DEPARTMENT

Three semester hours.

Ps. 201. CHILD GROWTH AND DEVELOPMENT

A study of the physical, mental, moral, emotional, social, motor, language and creative development of the child of elementary school age, and of the factors which aid or impede this development.

DR. GILLIGAN

Three semester hours.

Ps. 202. PSYCHOLOGY OF ADOLESCENCE

The dynamics of behavior in adolescence and of changing attitudes and concepts. Individual differences in development and performance are assessed in relation to physical, social, psychological, and moral factors.

MR. SCRUGGS

Three semester hours.

Ps. 203. PSYCHOLOGY OF CHILDHOOD AND ADOLESCENCE

A study of the principles underlying the physical, social, emotional, moral, and intellectual development of children and adolescents.

MR. NORRIS

Three semester hours.

Ps. 301. EMOTIONAL DEVELOPMENT OF CHILDREN

Emphasis is on an essentially psychoanalytic view of man. The topics discussed are: sexual and aggressive drives, competence, normal defenses, and many of those social phenomena which bear directly on child-rearing in our culture.

MR. KRELL

Three semester hours.

Ps. 311. ABNORMAL PSYCHOLOGY

The areas discussed are learning problems, neurotic behavior, psychosis in children, delinquency, brain damage, and retardation. Those aspects of the culture which are relevant are discussed in terms of pathological development.

MR. KRELL

Three semester hours.

DEPARTMENT OF BIOLOGICAL AND PHYSICAL SCIENCES

Chairman: E. KAMIEN, *Professor*

Associate Professor: J. FARINA

Assistant Professor: G. CARR; L. KLEE; P. SHEPHERD; R. TANNER

Instructor: S. LEE; J. LYON; S. MADER; F. OLDAY; N. SPICER;

E. SPIELMAN; C. WOLF

BI. 101. GENERAL BIOLOGY I

The principles of biology with emphasis on those broad theories which have contributed to the development of biology as a science.

MEMBERS OF THE DEPARTMENT

Three semester hours.

BI. 102. GENERAL BIOLOGY II

Continuation of Bi. 101, applying the principles to the various organic systems. *Prerequisite*: Bi. 101.

MEMBERS OF THE DEPARTMENT

Three semester hours.

BI. 151. BIOLOGICAL SCIENCES I

Fundamental principles of the biological relationships of living organisms: their structure, function, growth, differentiation, reproduction, and relation to their environment.

MEMBERS OF THE DEPARTMENT

Four semester hours.

BI. 152. BIOLOGICAL SCIENCES II

Continuation of an inquiry into the fundamental principles of the biological relationships of living organisms: their structure, function, growth, differentiation, reproduction, and relation to their environment. *Prerequisite*: Bi. 151.

MEMBERS OF THE DEPARTMENT

Four semester hours.

BI. 201. ANATOMY AND PHYSIOLOGY I

A study of the human organism relating structure to function. This part includes an introduction, basic study of cells, tissues, the anatomy and physiology of the skin, skeleton, muscle, digestive, respiratory, and circulatory systems. *Prerequisite*: Bi. 152.

MR. SHEPHERD

Four semester hours.

BI. 202. ANATOMY AND PHYSIOLOGY II

Continuation of Bi. 201. This part includes a study of the urinary, reproductive, endocrine, and nervous systems. *Prerequisite*: Bi. 201.

MR. SHEPHERD

Four semester hours.

BI. 211. MARINE BIOLOGY

An introduction to the physical and biological factors in the ocean. Emphasis is on the flora and fauna of New England.

Four semester hours.

BI. 212. ECOLOGY

Classification of various environmental areas common to our locality as to types and interdependence of comprising organisms.

MR. LYON

Four semester hours.

BI. 221. EVOLUTION

An introduction to the processes and theories of evolution.

DR. LEE, MR. OLDAY

Two semester hours.

BI. 231. FIELD BOTANY

Collection, preservation, and morphology of the major plant groups of New England. Emphasis on field and laboratory work.

MR. OLDAY

Four semester hours.

BI. 301. INVERTEBRATE ZOOLOGY

A survey of the phyla of invertebrate animals. A broad spectrum of living and preserved specimens are studied in the laboratory.

MR. SHEPHERD

Four semester hours.

BI. 302. COMPARATIVE VERTEBRATE ANATOMY

A study of the basic similarities and differences of the organ systems in the various classes of vertebrates, with reference to fields of embryology, histology, and paleontology. Representative vertebrates are studied in detail in the laboratory.

MR. SHEPHERD

Four semester hours.

BI. 311. PHYSIOLOGY

The study of general physiological processes stressing the physical and chemical bases of function. *Prerequisites* include introductory biology courses, chemistry, and physics.

DR. FARINA

Four semester hours.

BI. 312. PLANT PHYSIOLOGY

Analysis of the mechanisms of mineral nutrition, water relations, photosynthesis, respiration, regulation of growth and development, and interactions with the environment, with special reference to higher plants.

MR. OLDAY

Four semester hours.

BI. 321. ECOLOGY

Study of the relationship between living organisms and their environment, with emphasis on conservation of natural resources.

MR. LYON

Four semester hours.

BI. 402. GENETICS

Study of genetic principles and transmission of hereditary traits.

DR. KAMIEN

Three semester hours.

BI. 411. MICROBIOLOGY

Microorganisms: their isolation, cultivation, identification, genetics, physiology, and importance to man.

DR. FARINA

Four semester hours.

BI. 421. HISTORY OF BIOLOGY

A study of the historical development of the biological sciences, gained primarily through readings in the original classical papers.

MRS. MADER

Two semester hours.

BI. 422. PRINCIPLES OF EVOLUTION

A study of the concepts and mechanisms of evolution.

DR. LEE

Two semester hours.

CH. 201. GENERAL CHEMISTRY I

A systematic study of the elements, their important compounds, and the laws and theories explaining chemical phenomena. Special emphasis is given to the relationship of the periodic system, the electromotive series, and the electronic concept of matter.

DR. KLEE, DR. TANNER

Four semester hours.

CH. 202. GENERAL CHEMISTRY II

Continuation of Ch. 201 with additional topics stressing chemical calculation and analysis. *Prerequisite:* Ch. 201.

DR. KLEE, DR. TANNER

Four semester hours.

CH. 301. ORGANIC CHEMISTRY I

The compounds of carbon and the generalized methods of synthesis. Stress is placed upon the significance of structural formulae, the classification of properties, and group reactions.

DR. TANNER

Four semester hours.

CH. 302. ORGANIC CHEMISTRY II

Continuation of Ch. 301.

DR. TANNER

Four semester hours.

CH. 311. ANALYTICAL CHEMISTRY

A survey of the techniques used in analytical laboratories for quantitative and qualitative determinations and structure elucidations.

DR. TANNER

Four semester hours.

CH. 431. FUNDAMENTAL PRINCIPLES OF BIOCHEMISTRY

Emphasis on the dynamic interaction between principal metabolic pathways and the function of carbohydrates, lipids, and nitrogenous compounds.

MRS. MADER

Four semester hours.

PY. 101. PHYSICAL SCIENCE I

Presents those theories and principles necessary for the non-scientist's understanding of the many developments in chemistry.

DR. KLEE, MISS SPICER

Three semester hours.

Py. 102. PHYSICAL SCIENCE II

Continuation of Py. 101 with topics from physics, including astronomy, light, electricity, and nuclear science.

MR. CARR, DR. KLEE, MR. WOLF

Three semester hours.

Py. 201. PHYSICS I

Mechanics, heat, and sound.

MR. WOLF

Four semester hours.

Py. 202. PHYSICS II

Light and electricity, and modern physics. *Prerequisite:* Py. 201.

MR. WOLF

Four semester hours.

Py. 211. EARTH SCIENCES

Concepts and principles selected primarily from the fields of geology and astronomy. Some content is also selected from meteorology and oceanography.

MR. CARR

Four semester hours.

Sc. 101. SURVEY OF SELECTED TOPICS IN SCIENCE

Presents highlights of science with emphasis on the current status of our knowledge in selected areas. Consideration of the processes of science is included.

MEMBERS OF THE DEPARTMENT

Three semester hours.

DEPARTMENT OF EDUCATION

Chairman: M. GOURVILLE, *Professor*

Professor: M. SHANNON

Associate Professor: H. DRINAN

Assistant Professor: G. CUNNINGHAM; A. KIERNAN; P. KOPLEY

Instructor: R. GIOVINO; J. JONES; R. PERRY

Ed. 231. OBSERVATION-PARTICIPATION IN BIOLOGICAL SCIENCES I

Through observation, preparation of materials, and presentation of demonstrations in the Bi. 101 laboratories, the student becomes familiar with the materials and teaching-learning situations in the biological sciences.

Coordinator: MR. OLDAY

MEMBERS OF THE BIOLOGY DEPARTMENT

One semester hour.

ED. 232. OBSERVATION-PARTICIPATION IN BIOLOGICAL SCIENCES II

A continuation of Ed. 231, with the students assigned to the Bi. 102 laboratories.

Coordinator: MR. OLDAY

MEMBERS OF THE BIOLOGY DEPARTMENT

One semester hour.

ED. 251. WORKSHOP IN EDUCATION

The individual problems of the music teacher in relation to the whole educational enterprise: staff and curriculum action, grades one through twelve. Music specialists discover and define questions involving curriculum offerings, methods of grouping, guiding, evaluating, and reporting school progress. Planned observation in elementary and secondary schools is required.

MISS CUNNINGHAM

Three semester hours.

ED. 271. EDUCATIONAL MEASUREMENT: ELEMENTARY SCHOOL

Considers the nature of measurement, its purpose and value in the learning situation, and types of measuring techniques. Develops understanding of basic statistical concepts, the selection and use of measuring instruments, and the interpretations of the data secured.

MRS. MANEIB, DR. MCGAUVAN, MR. PERRY

Three semester hours.

ED. 272. EDUCATIONAL MEASUREMENT: SECONDARY SCHOOL

Considers the nature of measurement, its purpose and value in teaching; the appraisal and use of standardized tests; the construction of the teacher-made test; and basic statistical concepts. Techniques for marking, grading, and reporting are introduced.

DR. MCGAUVAN, MR. PERRY

Three semester hours.

ED. 281. PHILOSOPHY OF EDUCATION

A comparative analysis of selective philosophies and their relationship to educational theory and practice.

MR. LAWSON, DR. LYONS

Three semester hours.

ED. 311. THE TEACHING OF READING: ELEMENTARY SCHOOL

A critical analysis of fundamental issues and principles in the teaching of reading, including all phases of the reading program. The research in this and allied disciplines is evaluated in terms of basic and applied values. *Prerequisite*: Ps. 201.

MISS GIOVINO, DR. SHANNON

Two semester hours.

ED. 312. THE TEACHING OF LANGUAGE ARTS: ELEMENTARY SCHOOL

Concentrates on the several phases of the English language arts. Systematic attention is given to the scope and sequence of the language program, with emphasis on current practices in the development of skills in listening, speaking, and writing. *Prerequisite*: Ps. 201.

MISS KIERNAN

Two semester hours.

ED. 313. THE TEACHING OF ARITHMETIC: ELEMENTARY SCHOOL

The computational and reasoning processes of elementary school mathematics are reviewed with emphasis on activities, materials, and techniques effecting pupil discovery of mathematical concepts, relationships, and generalizations. *Prerequisite*: Ps. 201.

MRS. KOPLEY

Two semester hours.

ED. 314. INSTRUCTIONAL MATERIALS IN SELECTED AREAS OF THE
ELEMENTARY CURRICULUM

Acquaints the student with the subject matter of the elementary school in art, music, health and physical education, science, and social studies. These areas are examined for correlation between subjects; by comparison and use of textbooks, visual aids, curriculum guides; and through analysis of the techniques best adapted to each subject. *Prerequisite*: Ps. 201.

Coordinator: DR. DRINAN

Course instructors: DR. BENNETT, DR. DRINAN, DR. GARRITY,

MRS. JONES, MISS PINARDI

Five semester hours.

ED. 315. OBSERVATION OF CHILDREN IN THE ELEMENTARY SCHOOL:
REQUIRED SUPPLEMENTARY EXPERIENCE

The purposes, principles, and procedures developed in Ed. 311-314 give direction to observation experiences in elementary school classrooms.

MEMBERS OF THE DEPARTMENT

Non-credit.

ED. 331. THE CURRICULUM AND TEACHING OF ENGLISH IN THE
SECONDARY SCHOOL

Analyses are made of the objectives, content, methods, and materials of teaching literature, grammar, and composition in the secondary school. Observation in secondary schools is required.

MISS CALIRI, DR. FOY,

MRS. GUINDON

Three semester hours.

ED. 332. THE CURRICULUM AND TEACHING OF HISTORY IN THE
SECONDARY SCHOOL

An analysis is made of the materials and methods of teaching history in the secondary school. Attention is given to recent curricula on the emerging nations as well as on the western world. Observation in secondary schools is required.

MEMBERS OF THE HISTORY DEPARTMENT

Three semester hours.

ED. 333. THE CURRICULUM AND TEACHING OF BIOLOGY IN THE
SECONDARY SCHOOL

An analysis of the methods and materials currently used in teaching the biological sciences. Recent trends in the teaching of biology in the secondary school are considered, with particular reference to the Biological Sciences Curriculum Study. Observation in secondary schools is required.

MEMBERS OF THE BIOLOGY DEPARTMENT

Three semester hours.

ED. 342. THE HEALTH CURRICULUM

A study of the total curriculum of health in the schools, with special emphasis placed on curriculum trends in the elementary and secondary programs as well as techniques of curriculum construction. *Prerequisite:* HL 331.

DR. NEILSON

Three semester hours.

ED. 343. THE TEACHING OF HEALTH

Analysis of materials, methods, continuity of concepts used in teaching health in the schools. Observation is required.

MEMBERS OF THE HEALTH EDUCATION DEPARTMENT Two semester hours.

ED. 411. SEMINAR IN EDUCATION

Ethics, school law, curriculum study, and new trends in elementary education are discussed. The students re-evaluate their professional experiences and some time is devoted to a consideration of the preparation for the first teaching position. *Prerequisite:* Ed. 451.

MISS CUNNINGHAM, MISS GOURVILLE

Two semester hours.

ED. 412. EDUCATION OF EXCEPTIONAL CHILDREN

The special abilities, characteristics, and reading problems of exceptional children, and the relative merits of programs designed for them are critically analyzed. Also studied is the problem of disability in reading. *Prerequisite:* Ed. 311.

MISS GIOVINO, DR. SHANNON

Three semester hours.

ED. 421. HUMAN RELATIONS AND EDUCATION

Analyzes the problems of major racial and ethnic minorities in their efforts to become assimilated into American culture. Considers the history of these people and the role of the school and the history teacher in developing inter-group understanding.

DR. GOLER

Three semester hours.

ED. 451. STUDENT TEACHING: ELEMENTARY SCHOOL

Full-time student teaching in public elementary schools under the supervision of qualified teachers and principals and members of the college faculty. Provides experience for the student in applying and extending his knowledge of and ability in teaching children. *Prerequisites:* Ps. 201, Ed. 311, 312, 313, 314, 315.

MISS GOURVILLE, MEMBERS OF THE DEPARTMENT, AND

DR. GARRITY, MISS PINARDI

Eight semester hours.

ED. 461. STUDENT TEACHING OF ENGLISH: SECONDARY SCHOOL

Full-time student teaching in public secondary schools under the supervision of qualified teachers and principals and members of the college faculty. Provides experience for the student in applying and extending his knowledge of and ability in teaching English. *Prerequisites:* Ps. 202, Ed. 331.

MEMBERS OF THE ENGLISH DEPARTMENT

Six semester hours.

ED. 462. STUDENT TEACHING OF HISTORY: SECONDARY SCHOOL

Full-time student teaching in public secondary schools under the supervision of qualified teachers and principals and members of the college faculty. Provides experience for the student in applying and extending his knowledge of and ability in teaching history. *Prerequisites:* Ps. 202, Ed. 332.

MEMBERS OF THE HISTORY DEPARTMENT

Six semester hours.

ED. 463. STUDENT TEACHING OF BIOLOGY: SECONDARY SCHOOL

Full-time student teaching in public secondary schools under the supervision of qualified teachers and principals and members of the college faculty. Provides experience for the student in applying and extending his knowledge of and ability in teaching biology. *Prerequisites:* Ps. 202, Ed. 231, 232, 333.

MEMBERS OF THE BIOLOGY DEPARTMENT

Six semester hours.

ED. 471. STUDENT TEACHING: HEALTH

Full-time student teaching in public schools under the supervision of qualified teachers and principals and members of the college faculty. Provides experience for the student in applying and extending his knowledge of and ability in the school health program. *Prerequisites:* Ps. 202, Ed. 342, 343.

MEMBERS OF THE HEALTH EDUCATION DEPARTMENT Six semester hours.

DEPARTMENT OF ENGLISH

Chairman: W. BURTO, *Professor*

Associate Professor: R. FOY; K. KANSANNIVA; J. ZAITCHIK

Assistant Professor: F. CALIRI; M. GUINDON; H. HABER; G. TILLSON

Instructor: A. BOULUKOS; A. CHANDONNET; A. FRIEDMAN; R. GERST;
R. LAYDEN; J. LIGGERA; J. McLAUGHLIN

EN. 101. ENGLISH COMPOSITION

The study and application of the principles of effective writing. Develops awareness of diction, style, and grammatical usage.

MEMBERS OF THE DEPARTMENT Three semester hours.

EN. 141. THE LITERARY HERITAGE OF WESTERN CULTURE I

The study of man's relationship to God, to society, to individuals, and his attempts to discover his own nature forms the basis for an examination of representative works from the literature of Antiquity.

MEMBERS OF THE DEPARTMENT Three semester hours.

EN. 142. THE LITERARY HERITAGE OF WESTERN CULTURE II

The study of man's relationship to God, to society, to nature, and his attempts to discover his own potential is continued through an examination of representative selections from the literature of the Medieval world to the end of the Renaissance.

MEMBERS OF THE DEPARTMENT Three semester hours.

EN. 143. THE LITERARY HERITAGE OF WESTERN CULTURE III

A continuation of the study of those concepts fundamental to human life and thought through an examination of representative selections from the literature of the Enlightenment to the present time.

MEMBERS OF THE DEPARTMENT Three semester hours.

EN. 161. TYPES OF LITERATURE

A study is made of the accepted literary types, illustrated with selections from world literature.

MEMBERS OF THE DEPARTMENT Three semester hours.

EN. 201. EXPOSITORY ANALYSIS

An intensive investigation and application of the principles of modern exposition to college writing.

MRS. GUINDON, DR. ZAITCHIK

Three semester hours.

EN. 205. JOURNALISM

A survey designed to familiarize the student with the role of the press in modern society, to introduce him to problems of style and structure in news stories, and to afford practice in copy editing, news analysis, and feature writing.

MISS CALIRI

Three semester hours.

EN. 221. HISTORY AND DEVELOPMENT OF THE ENGLISH LANGUAGE

Examines English from an historical perspective as a basis for understanding the English language as it is now spoken and written. Studies the origin and development of English through phonetic, vocabulary, syntax, and semantic shifts in the language from its beginnings to the present.

MR. KANSANNIVA, MR. McLAUGHLIN

Three semester hours.

EN. 225. GRAMMAR AND LINGUISTICS

Investigates the analytical systems of traditional grammar, I-C analysis, and generative grammar. Special attention is given to the problem of grammar in the secondary school.

DR. FOY

Three semester hours.

EN. 231. SURVEY OF ENGLISH LITERATURE I

The historical development of English literature from the beginnings to 1800. Selected works by representative authors from each period are studied.

DR. BURTO, MR. FRIEDMAN

Three semester hours.

EN. 232. SURVEY OF ENGLISH LITERATURE II

The historical development of English literature from 1800 to the present. Selected works by representative authors from each period are studied.

DR. BURTO, MR. FRIEDMAN

Three semester hours.

EN. 241. SURVEY OF AMERICAN LITERATURE I

The historical development of American literature from the Colonial Period to the Civil War. Selected works by representative authors from each period are studied.

DR. FOY, DR. ZAITCHIK

Three semester hours.

EN. 242. SURVEY OF AMERICAN LITERATURE II

The historical development of American literature from the Civil War to the present time. Selected works by representative authors are studied.

DR. FOY, DR. ZAITCHIK

Three semester hours.

EN. 243. MAJOR AMERICAN WRITERS

Reading and discussion of such major American writers as Poe, Cooper, Hawthorne, Melville, Whitman, Emerson, Dickinson, and Frost. *For students other than concentrators in English.*

MR. GERST

Three semester hours.

EN. 251. LITERATURE FOR THE ADOLESCENT

A directed reading course in literature for the adolescent, aimed at supplementing the required reading in the secondary school. Attention is given to the historical development of the literature for that age as well as to the contemporary trends.

MISS CALIRI

Three semester hours.

EN. 281. STAGECRAFT

A functional approach to the study of theater arts. Participation in such workshop activity as scenery designing, building, paintings, and lighting translates theory into practice.

MR. KANSANNIVA

Three semester hours.

EN. 282. ACTING

Studies and exercises in the elements and methods of acting. Projects are undertaken with an eye to public productions at the end of the semester.

MR. TILLSON

Three semester hours.

EN. 301. STYLISTICS AND COMPOSITION

An investigation of literary, linguistic, and rhetorical approaches to composition and a study of theories of style and their implications for the teaching of composition. Students will participate with members of the English Department in En. 101.

DR. FOY, MRS. GUINDON, DR. ZAITCHIK

Three semester hours.

EN. 311. TRAGEDY

An intensive study of the theory and practice of tragedy, from Aeschylus and Aristotle to Camus and Arthur Miller. Both plays and novels are considered.

DR. BURTO, MR. FRIEDMAN

Three semester hours.

EN. 313. MODERN DRAMA

A critical study of the ideals, motives, and problems of modern life as revealed through the methods and types of modern European and American drama from Ibsen through Miller.

MRS. CHANDONNET, MR. TILLSON

Three semester hours.

EN. 321. ENGLISH LITERATURE OF THE MIDDLE AGES

Representative selections from the medieval period are studied, including the characteristic types: epic, lyric, chivalric romance, drama, fabliaux and ballads. Concentration is on the miracle, mystery and morality plays; *Sir Gawain and the Green Knight*; Langland (*Piers Plowman*); Gower (*Confessio Amantis*); Chaucer (*Troilus and Criseyde*); and Malory (*The Morte d'Arthur*).

MISS CALIRI

Three semester hours.

EN. 322. LITERATURE OF THE ENGLISH RENAISSANCE

An examination of the major subjects, techniques, and forms of the non-dramatic literature of the late sixteenth century. Spenser, Sidney, Daniel, Drayton, Jonson, Marlowe, Lyly, Greene, and Nashe are the writers who are studied in greatest detail.

MR. FRIEDMAN

Three semester hours.

EN. 323. ENGLISH LITERATURE OF THE SEVENTEENTH CENTURY

A study of the major seventeenth century writers of prose and poetry against the philosophical and political background of the period. Particular attention is given to Bacon, Donne and the Metaphysical Poets, Milton, Dryden, and the Restoration comic dramatists.

MR. FRIEDMAN

Three semester hours.

EN. 324. ENGLISH LITERATURE OF THE EIGHTEENTH CENTURY

An examination of the Augustan Age: its ironic prose, satiric poetry, and social criticism exemplified by Swift, Pope, Addison, Steele. A study of the later Neoclassical period: the writings of Johnson; the Gothic Romance developed by Walpole, Radcliffe, and Austen; the beginnings of Romantic poetry in Collins, Gray, Cowper, Burns.

MR. BOULUKOS

Three semester hours.

EN. 326. LITERATURE OF THE VICTORIAN PERIOD

A critical and historical study of the major writers of the Victorian Period in England. Both poetry and prose writers are considered, from Tennyson and Carlyle to the early Yeats and Pater.

MRS. GUINDON

Three semester hours.

EN. 329. MODERN BRITISH LITERATURE

Reading and discussion of the work of such writers as Shaw, James, Conrad, Joyce, Lawrence, Yeats, and Eliot.

DR. HABER

Three semester hours.

EN. 341. ENGLISH DRAMA TO 1642

A detailed study of the development of English drama (excluding Shakespeare) through the medieval, Elizabethan, and Jacobean periods. Readings include examples from the cycle plays, the moralities, Heywood, Lyly, Kyd, Jonson, Marlowe, Greene, Marston, Dekker, Beaumont and Fletcher, Ford, Webster, and Shirley.

MR. TILLSON

Three semester hours.

EN. 343. ENGLISH ROMANTIC POETRY

A study of Romanticism as seen through the writings of its major poets. Special attention is given to Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.

MR. LAYDEN, MRS. GUINDON

Three semester hours.

EN. 346. HISTORY OF THE ENGLISH NOVEL TO 1850

Reading and discussion of novels by such Eighteenth Century and early victorian authors as Defoe, Richardson, Fielding, Sterne, Austen, Scott, Emily Bronte, Thackeray, and Dickens.

DR. HABER

Three semester hours.

EN. 347. HISTORY OF THE ENGLISH NOVEL SINCE 1850

Reading and discussion of novels of such later Victorian and modern authors as Eliot, Hardy, James, Conrad, Forster, Joyce, Lawrence, and Huxley.

DR. HABER

Three semester hours.

EN. 357. HISTORY OF THE AMERICAN NOVEL

A systematic and detailed study of the development of the American novel within its historical and intellectual context. Examples are taken from the works of Brown, Cooper, Hawthorne, Melville, Howells, James, Dreiser, Steinbeck, Wolfe, Hemingway, and Faulkner.

DR. ZAITCHIK

Three semester hours.

EN. 364. BRITISH AND AMERICAN POETRY OF THE TWENTIETH CENTURY

A critical and historical study of the major poets of the twentieth century. Detailed consideration is given to the works of Auden, Eliot, Frost, and Yeats.

DR. BURTO

Three semester hours.

EN. 367. MODERN BRITISH AND AMERICAN FICTION

Primarily a critical study of the development of the modern short story and novel in England, Ireland, and America. Among the authors studied are James, Conrad, Joyce, Woolf, Hemingway, and Faulkner.

DR. BURTO, DR. HABER

Three semester hours.

EN. 377. MAJOR THEMES IN THE LITERATURE OF THE RENAISSANCE

An investigation of the concepts of the "fool," the "wise man," and the "artist" in the works of major literary figures of the Renaissance before Shakespeare. The authors studied include Bocaccio, Castiglione, Cellini, Cervantes, Rabelais, Montaigne, Erasmus, More, Spenser, and Sidney.

DR. FOY

Three semester hours.

EN. 381. DIRECTING

Studies and exercises in the methods of rehearsal, coaching, and directorial approaches. Students will be responsible for directing short plays at the end of the semester. *Prerequisite:* En. 282 and permission of the instructor.

MR. TILLSON

Three semester hours.

EN. 401. READINGS IN MIDDLE ENGLISH

Selected readings mainly from the Fourteenth Century and including the Harley lyrics, *Sir Gawain and the Grene Knight*, and the plays of the Wakefield Master. *Prerequisite:* En. 221.

MR. McLAUGHLIN

Three semester hours.

EN. 411. CHAUCER

An intensive reading of selected works, approximately in chronological order, beginning with *The Boke of the Duchess* and ending with *The Tales of Canterbury*. *Prerequisite:* En. 221.

MR. McLAUGHLIN

Three semester hours.

EN. 412. SHAKESPEARE I

Interpretation is made of a selected number of the plays, including examples of the histories, tragedies, and comedies, to show the depth of the writer's insights into human values and the variety and scope of his mind and art.

DR. BURTO, MISS CALIRI

Three semester hours.

EN. 413. SHAKESPEARE II

Interpretation is made of a selected number of plays not studied in En. 412.

DR. BURTO

Three semester hours.

EN. 415. MILTON

The thought and expression of Milton's poetry and prose are studied against the background of seventeenth-century England.

DR. ZAITCHIK

Three semester hours.

EN. 421. EMERSON AND HAWTHORNE

The major ideas and literary techniques of Emerson and Hawthorne are examined within the context of nineteenth century America.

DR. ZAITCHIK

Three semester hours.

EN. 422. MELVILLE AND WHITMAN

The major ideas and literary techniques of Melville and Whitman are examined within the context of nineteenth century America.

DR. ZAITCHIK

Three semester hours.

EN. 471. LITERARY CRITICISM

Theories of the great literary critics from antiquity to the present. Particular attention is given to the critical theory of the twentieth century and to the problem of conflict between the creative act of the critic and the imaginative act of the artist. *For concentrators in English only.*

DR. FOY

Three semester hours.

EN. 481. DIRECTED STUDIES IN LITERATURE

The student, through regular and frequent consultation with his instructor, develops a course of directed reading in literature and defines a problem for individual research. The student's findings are presented in a paper of significant proportions.

MEMBERS OF THE DEPARTMENT

Three semester hours.

EN. 482. DIRECTED STUDIES IN LANGUAGE ANALYSIS

The student, through regular and frequent consultation with his instructor, develops a course of directed reading in linguistics, semantics, or stylistics and defines a problem for individual research. The student's findings are presented in a paper of significant proportions.

MEMBERS OF THE DEPARTMENT

Three semester hours.

DIVISION OF FINE ARTS

Chairman: E. GILDAY, *Professor*

Assistant Chairman, Art: L. PANAS, *Associate Professor*

Assistant Chairman, Music: W. TRAPHAGAN, *Associate Professor*

Professor, Music: W. FISHER; D. PROCOPIO

Associate Professor, Music: B. BENNETT; P. BREGOR

Assistant Professor, Art: C. PLUMMER

Music: D. BRAVO; P. GAY; P. GAYZAGIAN; R. WHITE

Instructor, Art: R. GRIFFITH; B. PINARDI; S. SWARTZ

Music: A. HOLEVAS; C. LINDBALD; J. OGASAPIAN; S. SMITH

Applied Music Instructors: D. BOUZIANIS; M. CHALOFF; J. DAVIDSON;

J. EVANS; D. FARNHAM; O. FLAGG; F. GAVIANI; E. GERLING;

W. GRASS; D. JUMP; I. LINDBALD; H. O'DONNELL; J. PAELLA;

N. PAELLA; M. PRESS; D. SMITH; R. SUMMERS; W. WRZESIEN;

E. TOKARCZYK; M. ZUCKER

ART

AR. 101. ART IN WESTERN CIVILIZATION

The basic causes and purposes of architecture, sculpture, and painting are the main concerns in this study of the key monuments of art. The everchanging images of man are reflected in selected examples from the Greek, Byzantine, Middle Ages, Renaissance, and Modern periods.

MR. PANAS, MISS SWARTZ

Three semester hours.

AR. 201. INTRODUCTION TO THE FINE ARTS

A survey lecture-studio course which emphasizes the fundamental relation of music and the visual arts. *For concentrators in the Fine Arts.*

MEMBERS OF THE DEPARTMENT

Three semester hours.

AR. 206. ART AND MUSIC EXPERIENCE

A painting course designed to show the formal relationship of music and art. Primarily a studio course involving audio-visual-action experiences. *For concentrators in Music only.*

MR. PANAS, MR. PLUMMER

Three semester hours.

AR. 211. BASIC DESIGN

An integrated study of two and three-dimensional design principles and how they articulate structure, space, and form. The development of visual ideas that relate to painting, sculpture, graphic arts, and architecture. *Recommended for concentrators in Art.*

MR. GRIFFITH, MR. PLUMMER

Three semester hours.

AR. 221. ARTS AND CRAFTS

Investigation and experimentation with craft materials generally considered within the manipulation scope of elementary school pupils working with simple equipment.

MISS PINARDI

Three semester hours.

AR. 222. CERAMICS

A systematic course emphasizing studio experience using the potter's wheel, firing the kiln, and applying glazes to individually designed pieces.

MISS PINARDI, MR. PLUMMER

Three semester hours.

AR. 231. FABRIC DESIGN

Fundamental principles of color, line, and form are applied to excellence of design in clothing and accessories. Study of current trends of fashion followed by experimental work in printing, dying, batik, and other techniques as applied to decorative design.

MR. GRIFFITH

Three semester hours.

AR. 241. GRAPHICS I

An introduction to the methods of linoleum and wood block cutting. The approach is creative rather than directed, emphasizing experimentation and exploration in many areas of printmaking.

MR. GRIFFITH, MISS SWARTZ

Three semester hours.

AR. 251. PAINTING I

Oil painting and related media are taught as a vehicle for serious creative expression. The student is encouraged to explore subjects, styles, and techniques that are of interest to him. Instruction is directed to the individual needs of each student.

MR. PANAS, MISS PINARDI, MR. PLUMMER

Three semester hours.

AR. 301. GRAPHICS II

An introduction to the methods of lithography and etching. Emphasis is on design and printing techniques. *Prerequisite:* Ar. 241.

MR. GRIFFITH, MISS SWARTZ

Three semester hours.

AR. 311. PAINTING II

Students showing a high proficiency in painting are given increased freedom to expand their creative expressions. *Prerequisite:* Ar. 251.

MISS PINARDI, MR. PLUMMER

Three semester hours.

AR. 321. HISTORY OF MODERN ART

A survey in the history of Modern Art from its nineteenth century sources to the development of the present day. Emphasis on the painting, sculpture, and architecture of Europe and America in the twentieth century.

MISS SWARTZ

Three semester hours.

AR. 323. RENAISSANCE AND ITALIAN PAINTING

A detailed study of the works of great masters such as DaVinci, Michelangelo, Giotto, Georgone, Titan, and others of the times. This period has long been considered one of man's greatest adventures in art.

MR. PANAS

Three semester hours.

AR. 324. HISTORY OF AMERICAN ART

The history of the American artist is traced from his European tradition to the development of a strictly American synthesis and to modern contemporary art.

MR. PANAS, MISS SWARTZ

Three semester hours.

MUSIC HISTORY AND APPRECIATION

MU. 101. MUSIC OF WESTERN CIVILIZATION

A survey of music from the troubadors to the aleatoric music of the present. Significant forms, styles, and aesthetic concepts are examined. Chamber music, leider, opera, oratorio, symphonic music and other mediums are studied. Philosophies of music are examined against specific periods in history.

MR. BRAVO

Three semester hours.

MU. 151. MUSIC HISTORY AND LITERATURE I

A study is made of the development of the sacred and secular forms of music from the pre-Christian era up to the middle of the eighteenth century.

MR. BREGOR

Three semester hours.

MU. 152. MUSIC HISTORY AND LITERATURE II

Studies the music of the period from the middle of the eighteenth century to the present. The impact on music of the changing social philosophies is analyzed.

MR. BREGOR

Three semester hours.

BASIC MUSIC

MU. 111. MUSIC EXPERIENCES I

Provides for the development of musical skills and understandings to further artistic growth and appreciation.

MR. HOLEVAS

Two semester hours.

MU. 112. MUSIC EXPERIENCES II

Continuation of Mu. 111, progressing to an advanced level.

MR. HOLEVAS

Two semester hours.

MU. 201. SIGHT SINGING AND DICTATION I

Concentrates mainly on solfege, developed by singing at sight, and on ear training, developed by rhythmic and melodic dictation.

MR. LINBALD, MR. SMITH, MR. WHITE

Two semester hours.

MU. 202. SIGHT SINGING AND DICTATION II

Continuation of Mu. 201.

MR. LINBALD, MR. SMITH, MR. WHITE

Two semester hours.

MU. 203. ADVANCED SIGHT SINGING AND DICTATION I

Continuation of Mu. 202, progressing to more difficult music, two-part melodic dictation, choral dictation, and the study of the C clefs.

MR. HOLEVAS, MR. OGASAPIAN, MR. SMITH

One semester hour.

MU. 204. ADVANCED SIGHT SINGING AND DICTATION II

Continuation of Mu. 203.

MR. HOLEVAS, MR. OGASAPIAN, MR. SMITH

One semester hour.

MU. 211. FUNDAMENTALS OF MUSIC

The technical understanding and handling of music notation are brought about through exercises and through examples of music literature.

DR. PROCOPIO, MR. SMITH

One semester hour.

MU. 212. INTRODUCTION TO HARMONY

The foundation for the study of harmony is established by intensive study of scales, intervals, triads, and the simpler chordal progressions.

DR. PROCOPIO, MR. SMITH

One semester hour.

MU. 213. DIATONIC HARMONY

Continuation of Mu. 212, progressing to four-part harmonization of melodies using the primary and secondary chords, non-harmonic tones, and simple modulation as exemplified in the music of the eighteenth century. Harmonic analysis and creative work are integrated with the written exercises.

DR. PROCOPIO

Two semester hours.

MU. 214. CHROMATIC HARMONY

Advanced harmony, including secondary dominants, secondary seventh chords, altered chords, realization of figured basses, and chromatic modulation as exemplified in the music of the nineteenth century. Corresponding progress is made in the integrated studies: harmonic dictation, harmonic and structural analysis, and creative work.

DR. PROCOPIO

Two semester hours.

MU. 311. ORCHESTRATION

The study of instrumentation and orchestration, emphasizing score reading and the writing of music for all orchestral instruments individually and in combination.

MR. GAY, MR. SMITH

Three semester hours.

MU. 316. EIGHTEENTH CENTURY COUNTERPOINT

The study of the vocal and instrumental polyphony of the eighteenth century, based on tonality. Choral and instrumental arranging in this style is emphasized. Representative music of the eighteenth century is analyzed from a contrapuntal point of view.

MR. HOLEVAS, MR. TRAPHAGAN

Three semester hours.

PERFORMANCE

INSTRUMENTAL TECHNIQUES

MU. 221. INSTRUMENTAL CLASS: STRING

Intensive class instruction in the fundamentals of playing string instruments. The student is expected to gain skill for beginning teaching and demonstration purposes.

MR. BRAVO, MISS JUMP

Two semester hours.

MU. 222. INSTRUMENTAL CLASS: WOODWIND

Intensive class instruction in the fundamentals of playing woodwind instruments. The student is expected to gain skill for beginning teaching and demonstration purposes.

MR. SUMMERS, MR. WRZESIEN

Two semester hours.

MU. 223. INSTRUMENTAL CLASS: BRASS

Intensive class instruction in the fundamentals of playing brass instruments. The student is expected to gain skill for beginning teaching and demonstration purposes.

MR. GAY, MR. PAELLA

Two semester hours.

MU. 224. INSTRUMENTAL CLASS: PERCUSSION

Intensive class instruction in the fundamentals of playing percussion instruments. The student is expected to gain skill for beginning teaching and demonstration purposes.

MR. TRAPHAGAN

Two semester hours.

MU. 321. INSTRUMENTAL CONDUCTING

Advanced baton technique, score reading, and principles of instrumental interpretation. This is a laboratory course in the study of suitable music literature for small ensemble, orchestra, and band, and of the techniques of organizing instrumental programs.

MR. GAY, MR. TRAPHAGAN

Two semester hours.

CHORAL TECHNIQUES

MU. 231. ELEMENTARY CONDUCTING

Offers training in the technique of the baton as preparation for advanced instrumental and choral conducting. With laboratory experience, the student acquires knowledge of the basic problems of conducting, and their solutions.

MR. WHITE

Three semester hours.

MU. 331. ADVANCED CHORAL CONDUCTING

The many techniques involved in training and conducting a chorus are demonstrated, studied and practiced. A study is made of a wide repertoire of choral music.

DR. GILDAY

Three semester hours.

MU. 332. VOCAL AND CHORAL TECHNIQUES

Prepares the student to handle vocal problems on both an individual and group basis. Training is given in basic choral techniques such as diction, blend, pitch, balance, attacks, and releases.

DR. GILDAY

Three semester hours.

KEYBOARD TECHNIQUES

MU. 141. KEYBOARD EXPERIENCES

Designed to give the non-music major a functional proficiency at the piano, and to enrich his knowledge by means of the keyboard.

MR. BREGOR

Three semester hours.

MU. 241, 242, 243, 244, 245, 246. FUNCTIONAL PIANO

Students develop a functional proficiency at the keyboard through class-piano instruction, beginning in the freshman year and continuing until the required proficiency is attained.

MR. BREGOR, MR. SMITH

One semester hour.

SOLO TECHNIQUES

MU. 451. MAJOR PERFORMANCE: RECITAL CLASS I

The student presents a recital during his senior year which must demonstrate a high degree of proficiency in his field of applied specialization. The program is given publicly, or privately for a faculty committee. The course provides a laboratory in which are developed the techniques of stage deportment, program building, and critical analysis.

MR. LINDBALD

Non-credit.

MU. 452. MAJOR PERFORMANCE: RECITAL CLASS II

Continuation of MU. 451.

MR. LINDBALD

Non-credit.

ENSEMBLES

Students must participate in an ensemble suitable to their major area of performance for eight semesters, and must also earn two semester hours credit in vocal or instrumental ensembles other than those related to the major performance medium.

MU. 261. ENSEMBLE: VOCAL

Concert Choir. Open to a limited number of students selected by audition. The members study a wide variety of choral compositions and perform frequently in public and at college functions.

DR. GILDAY

One-half semester hour.

Laboratory Chorus. Includes all music concentrators who are not members of the Concert Choir, and other students who enjoy singing. Standard choral literature is studied and performed in public and at college functions.

DR. PROCOPIO, MR. WHITE

One-half semester hour.

Festival Chorus. Open to all students in the college who meet the requirements. Major choral works are studied and prepared for public performance. Qualified students perform as soloists in oratorio and advanced choral music literature.

DR. GILDAY

One-half semester hour.

MU. 262. ENSEMBLE: INSTRUMENTAL

Wind Ensemble. Advanced instrumentalists are eligible for this ensemble and are selected by audition. Works from traditional and contemporary repertoire are studied and performed in public. Opportunity is offered for ensemble and solo performance with band accompaniment.

MR. TRAPHAGAN

One-half semester hour.

Concert Band. For students other than those who qualify for the Wind Ensemble. Works suitable for secondary school bands or above are studied and performed. Membership is by audition.

MR. GAY

One-half semester hour.

Laboratory Band. For students other than those who qualify for the Concert Band. Provides ensemble experience on a band instrument, with the repertoire limited to elementary and intermediate material.

MR. WRZESIEN

One-half semester hour.

Chamber Orchestra. Advanced instrumentalists are eligible and are selected by audition. Works suitable for chamber orchestra are studied and performed in public. Opportunity for solo performance with orchestral accompaniment is offered.

One-half semester hour.

Laboratory Orchestra. For students other than those who qualify for the Chamber Orchestra. Provides ensemble experience on stringed instruments, with the repertoire limited to elementary and intermediate material.

One-half semester hour.

Small Ensembles. For students interested in small ensembles, string quartets, madrigal groups, brass or woodwind ensembles are organized to encourage study and performance in this type of musical activity.

MEMBERS OF THE DEPARTMENT

One-half semester hour.

APPLIED MUSIC

MU. 263. APPLIED MUSIC

Concentrators in music are required to take one half-hour music lesson each week of the semester from a member of the faculty for applied music. There are fourteen lessons each semester followed by an examination before a faculty committee.

MEMBERS OF THE

FACULTY FOR APPLIED MUSIC

One semester hour.

PROFESSIONAL MUSIC EDUCATION

MU. 381. MUSIC IN THE ELEMENTARY SCHOOL

Develops those skills, understandings, and knowledge of materials necessary in teaching children in the elementary school through the five areas of musical experience: singing, listening, rhythmic activity, playing, and creating.

DR. FISHER

Three semester hours.

MU. 382. MUSIC IN THE SECONDARY SCHOOL

Considers the development of a suitable music program for grades seven through twelve. The major topics include: the application of philosophy of music education to the secondary school; professional relationships; the aims, content, organization, teaching techniques and materials, and evaluation of required and elective courses.

MR. GAYZAGIAN

Two semester hours.

MU. 384. INSTRUMENTAL MUSIC IN THE SCHOOLS

This course presents procedures and materials which are necessary to fulfill the demands of instrumental music in the public schools.

MR. BRAVO

Two semester hours.

MU. 391. SUPERVISION OF MUSIC EDUCATION

Examines the role of the director or supervisor of music. The topics studied are: principles of supervision, administrative duties and responsibility for curriculum development, scheduling, evaluating, purchase of equipment and supplies, and professional ethics and affiliations.

MR. GAYZAGIAN

Three semester hours.

MU. 491. STUDENT TEACHING: ELEMENTARY SCHOOL

Student teaching of music in public elementary schools under skilled supervision. Provides experience for the student in applying the principles and techniques studied in the courses in music education, and in using the recommended materials.

MR. GAYZAGIAN AND

MEMBERS OF THE DEPARTMENT

Four semester hours.

MU. 492. STUDENT TEACHING: SECONDARY SCHOOL

Student teaching of music in public secondary schools under skilled supervision. Provides experience for the student in applying the principles and techniques studied in the courses in music education.

MR. GAYZAGIAN AND

MEMBERS OF THE DEPARTMENT

Four semester hours.

DEPARTMENT OF HEALTH EDUCATION
AND PHYSICAL EDUCATION

Chairman: E. NEILSON, *Professor*

Associate Professor: M. GARRITY

Assistant Professor: I. CISZEK

Instructor: J. ROSENKRANZ

College Nurse: I. O'LOUGHLIN, R.N.

HEALTH EDUCATION

HL. 201. FOUNDATIONS FOR HEALTH

An analysis of the forces affecting an individual's health, by examining recent scientific facts concerned with improving and maintaining the health of the body and the mind.

DR. GARRITY

Three semester hours.

HL. 211. CURRENT PROBLEMS IN SAFETY AND FIRST AID

Basic principles of safety education and first aid; current safety programs as they apply to the home, school, and community.

DR. GARRITY

Three semester hours.

HL. 303. KINESIOLOGY

The study of the origin, insertion, and actions of skeletal muscles and application of selected principles of muscle mechanics to the analysis of body movement for daily living or lifetime sports. *Prerequisite:* Bi. 201-202.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 305. COMMUNICABLE AND NON-COMMUNICABLE DISEASES

Nature, prevention, control of common communicable and non-communicable diseases in relation to health knowledges, attitudes, and practices in society. *Prerequisite:* HL. 201.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 306. EPIDEMIOLOGY

Classic epidemics, evaluation of epidemiological principles, and techniques of investigation and epidemiological analysis of selected types of diseases. *Prerequisite:* HL. 305.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 307. EVOLVING PATTERNS OF COMMUNITY HEALTH

The welding together of health manpower in a community to result in a team of experts meeting the needs of all of the people. *Prerequisite:* HL. 331.

DR. NEILSON

Three semester hours.

HL. 311. NUTRITION

The science of nutrition is the study of food and its relationship to the well-being of the human body. *Prerequisite:* HL. 201.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 321. OBSERVATION OF HEALTH EDUCATION

Direct observation of health education in the schools, hospitals, community health centers, and voluntary health organizations.

MEMBERS OF THE DEPARTMENT

Non-credit.

HL. 328. ENVIRONMENTAL HEALTH-EARTH POLLUTANTS

The physical environment and its relationship to disease, causation; air, water, milk, food, radiological agents, earth and sea factors. *Prerequisite:* HL. 201.

DR. NEILSON

Three semester hours.

HL. 331. THE SCHOOL HEALTH PROGRAM

A definitive study of the organization and development of school health programs; coordination of school, community health programs, and state and federal legislation. *Prerequisite:* HL. 201.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 341. HEALTH IN THE FAMILY

The study of the family as a basic unit in society, with particular consideration given to the physiology of human reproduction growth and development, and personal health factors affecting the family unit. *Prerequisite:* HL. 201.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 345. HEALTH GUIDANCE

A study of common health problems experienced by students or others with consideration given to psychosomatic symptoms, and mental and physical changes a health educator should know. *Prerequisite:* HL. 341.

DR. NEILSON

Three semester hours.

HL. 401. FIELD WORK IN HEALTH

Directed research and participation in voluntary, community, state, health organizations and centers. *Prerequisite:* HL. 307.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 402. HEALTH SEMINAR

Intensive study and inquiry given to programs, organizations, departments of health, health centers, and professional literature. *Prerequisite:* HL. 401.

DR. NEILSON

Three semester hours.

HL. 407. ORGANIZATION AND ADMINISTRATION OF HEALTH PROGRAMS

Advanced studies of current organization and administration of state and federal health organizations and programs. *Prerequisite:* HL. 402.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 408. GUIDED OBSERVATION PRACTICES

Advanced research planning and execution of health knowledges, skills, and motivation procedures for the realization of health concepts.

MEMBERS OF THE DEPARTMENT

Non-credit.

HL. 409. CONTEMPORARY WORLD HEALTH PROBLEMS

A study of human welfare and health problems as an underlying force in contemporary world affairs. Special attention is given to health problems and human ecology in underdeveloped areas of the world. *Prerequisites:* HL. 201, 311.

DR. NEILSON

Three semester hours.

HL. 424. ADVANCES IN HEALTH SCIENCES

The relative importance of prevention and cure, and the multiplicity of changes affecting human beings necessitates a framework of scientific concepts which will establish guidelines for individual decision-making throughout life. *Prerequisite:* HL. 201.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HL. 428. LEARNING IN THE NATURAL ENVIRONMENT

The study of the philosophy and procedures using the natural environment as a learning center. Opportunities are provided for developing an awareness and an understanding of the relationships in nature through the enrichment of learning experience.

DR. GARRITY

Three semester hours.

PHYSICAL EDUCATION

PE. 101. PHYSICAL EDUCATION I

WOMEN:

Seeks to develop organic vigor, strength, agility, balance, flexibility, coordination, and efficient body movement, since the state of being of each student and her physical fitness is essential to effective living. Emphasis is placed on body conditioning exercises, fitness, and team activities.

DR. GARRITY, MRS. ROSENKRANZ

One-half semester hour.

MEN:

Physical education for men is devoted to the attainment of physical fitness by the encouragement of daily exercise habits. This objective is reached through the medium of gymnastics and team sports.

MR. CISZEK

One-half semester hour.

PE. 102. PHYSICAL EDUCATION II

WOMEN:

Encourages daily regimen of activities through individual performance of various levels of physical fitness experiences which interest and ability permit. A program of rhythms is offered with emphasis on square and folk dancing as well as group and team activities.

DR. GARRITY, MRS. ROSENKRANZ

One-half semester hour.

MEN:

Provides increased loads of physical activities centering around body mechanics, tumbling, wrestling, individual and team activities.

MR. CISZEK

One-half semester hour.

DEPARTMENT OF HISTORY

Chairman: P. GOLER, *Professor*

Professor: D. O'LEARY

Associate Professor: F. NORTON

Assistant Professor: C. BENTAS; D. BERGERON; P. BLEWETT; J. DENNING;
R. DERRY; J. FITZGERALD; M. HINCHEY

Instructor: H. BAKKAN; E. BONKOWSKY; C. CARROLL; M. HARDY;
H. SCHWARTZ; J. SHEA

HI. 101. WESTERN CIVILIZATION TO 1700

An analysis of the major forces in the development of western civilization from its Near Eastern origins to 1700.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HI. 102. WESTERN CIVILIZATION SINCE 1700

An examination of the major forces in the development of the western world since 1700.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HI. 111. MODERN EUROPEAN HISTORY

The influence of the Middle Ages, the Renaissance, and the Reformation on the succeeding political and social eras is traced as a background to an understanding of contemporary European political and social problems.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HI. 121. HISTORY OF THE UNITED STATES TO 1865

Traces the development of American institutions from colonization to the Civil War.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HI. 122. HISTORY OF THE UNITED STATES SINCE 1865

An analysis of the significant political, social, economic and cultural developments in the United States from the end of the Civil War to the present.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HI. 123. UNITED STATES HISTORY AND GOVERNMENT

An extensive survey is made of the Constitution of the United States insofar as it contributed to the development of American ideals and institutions, and to the solution of major problems.

MR. FITZGERALD

Three semester hours.

HI. 201. THE ANCIENT WORLD

An analysis of the ancient and classical cultures from the birth of civilization to the fall of Rome.

MR. DERRY

Three semester hours.

HI. 202. THE MEDIEVAL WORLD

Surveys European history during the formative period from the end of the ancient world through the High Middle Ages.

MR. DERRY

Three semester hours.

HI. 206. CLASSICAL ORIGINS OF WESTERN CIVILIZATION I

Concentrated historical study of the political, social, and cultural history of Greece from the earliest times through the Hellenistic period.

DR. BENTAS

Three semester hours.

HI. 207. CLASSICAL ORIGINS OF WESTERN CIVILIZATION II

Concentrated historical study of the political, social, and cultural history of Rome from the earliest times through the late Roman Republic.

DR. BENTAS

Three semester hours.

HI. 211. EUROPE IN TRANSITION: 1300-1648

An analysis of European civilization from the High Middle Ages to the mid-seventeenth century. The emphasis is on the breakup of the medieval world and the political, cultural, economic, and religious changes associated with the Renaissance and Reformation eras.

MR. BLEWETT

Three semester hours.

HI. 212. THE OLD REGIME AND REVOLUTION: 1648-1815

A continuation of HI. 211, this course gives attention to the intellectual and political climates of opinion, the social and economic institutions of the Old Regime, and the changes brought about by the eighteenth century revolutions.

MR. BLEWETT

Three semester hours.

HI. 221. AMERICAN COLONIAL HISTORY

A survey course in the history of the colonial areas of North America which were to become incorporated into the original United States of America, with emphasis upon the development of culture practices and institutional patterns.

MR. CARROLL

Three semester hours.

HI. 222. THE NATIONAL PERIOD

A study of the crucial period during which Americans united to form a more perfect union. Special emphasis on the origins of Jeffersonian and Jacksonian democracy and their social content, reform movements and the origin of abolitionism.

MR. BERGERON

Three semester hours.

HI. 231. HISTORY OF ENGLAND TO 1700

The evolution and development of the English people and their institutions is examined in depth.

MR. DERRY

Three semester hours.

HI. 232. HISTORY OF ENGLAND SINCE 1700

An examination of the changing role of Britain in world affairs, this course emphasizes the imperial development of England as well as its present position. Attention is given to political, social, and intellectual developments. *Prerequisite:* Hi. 231.

MR. BLEWETT

Three semester hours.

HI. 301. BYZANTINE CIVILIZATION

Historical survey of the significant political, social, and cultural changes in the Eastern Greco-Roman Empire, from the founding of Constantinople in 330 A.D. to its conquest in 1453 A.D.

DR. BENTAS

Three semester hours.

HI. 302. BYZANTINE CULTURE

Study of Byzantine literature, religion, learning and art, illustrating the role of Byzantium as a custodian of the classical past, its relation to Western Renaissance, and its value as a source for understanding modern Balkan and Near Eastern culture. *Prerequisite:* Hi. 301.

DR. BENTAS

Three semester hours.

HI. 311. EUROPE IN THE NINETEENTH CENTURY

Traces the major developments in nineteenth century Europe from the Congress of Vienna through the crises of national imperialism. Major emphasis is given to nationalism, industrialism, the unification of Italy and Germany, and the changing patterns of power. *Prerequisite:* Hi. 212.

DR. GOLER

Three semester hours.

HI. 312. EUROPE IN THE TWENTIETH CENTURY

An examination of the events in European history from the Treaty of Versailles to the present. Special attention is given to current developments. *Prerequisite:* Hi. 311.

DR. GOLER, MR. SHEA

Three semester hours.

HI. 321. THE NATION DIVIDED: UNITED STATES IN
MID-NINETEENTH CENTURY

An examination of those factors which led up to the Civil War, the conflict itself, and ante-bellum America. *Prerequisite:* HI. 222.

MR. NORTON

Three semester hours.

HI. 322. UNITED STATES IN THE TWENTIETH CENTURY

Examines the development of the United States in the twentieth century. Special attention is given to political and economic developments such as the New Freedom and the New Deal as well as to the changing international scene. *Prerequisite:* HI. 321.

DR. GOLER, DR. HINCHEY

Three semester hours.

HI. 325. CIVIL WAR AND RECONSTRUCTION

Examines the Civil War and Reconstruction in terms not only of the events but also of traditional and revisionist interpretations.

MR. BERGERON

Three semester hours.

HI. 351. FRANCE AND ENGLAND IN THE SEVENTEENTH CENTURY

A comparative study of two societies undergoing change. One has political revolution; the other retains political stability. Emphasis in the course is on interpretation and analysis.

MR. BLEWETT

Three semester hours.

HI. 352. FRENCH REVOLUTION AND EMPIRE

An in-depth analysis of French society 1715-1815, which attempts to understand the causes of the French Revolution and its aftermath.

MR. BLEWETT

Three semester hours.

HI. 355. MODERN FRANCE

This course traces the development of events in France from 1870 through the Fifth Republic.

MR. SHEA

Three semester hours.

HI. 421. AMERICAN FOREIGN RELATIONS IN THE TWENTIETH CENTURY

An appraisal of United States foreign policies, the reaction of Americans to the changing international situation, and the American policies of other governments since the beginning of the twentieth century. Topics include: rivalries in Asia, the rise of Anglo-American friendship, World War I, the retreat to isolationism, World War II, and postwar Russian-American relations.

DR. GOLER, DR. O'LEARY

Three semester hours.

HI. 422. UNITED STATES SINCE 1941

An examination of the foreign and domestic policies of the United States since World War II.

DR. HINCHEY

Three semester hours.

HI. 424. ECONOMIC HISTORY OF THE UNITED STATES TO 1865

An examination of the economic history of the United States to 1865.

MR. BERGERON

Three semester hours.

HI. 425. ECONOMIC HISTORY OF THE UNITED STATES SINCE 1865

An examination of the economic history of the United States since 1865.

MR. BERGERON

Three semester hours.

HI. 431. MILITARY HISTORY

An examination of the military history of the United States from the Colonial militia to the present.

MR. NORTON

Three semester hours.

HI. 461. MODERN HISTORY OF THE ARAB WORLD

A study of the Arab countries of the Middle East from 1798, focusing on the impact of the west on this area, and the development of these states into independent nations.

Three semester hours.

HI. 465. THE NEW ORIENT

An examination of Japanese and Southeast Asian history in the twentieth century. Particular attention is given to the rise and fall of Japan as a great power and to the emergence of the independent nations of Southeast Asia.

DR. GOLER

Three semester hours.

HI. 466. CHINA IN THE MODERN WORLD

An examination of the role of China in the twentieth century, tracing developments from the fall of the Manchu dynasty to the development of China as a nuclear power under communism.

DR. GOLER

Three semester hours.

HI. 471. IDEOLOGY AND WORLD AFFAIRS

An examination of the ideologies of the twentieth century: nationalism, fascism, communism, and their conflicts with liberal democracy.

DR. GOLER

Three semester hours.

HI. 472. THE WORLD SINCE 1900

Designed to provide the student with the immediate historical background of his own time, it focuses attention on Europe and America, although Asian and African developments receive much attention.

MR. BLEWETT

Three semester hours.

HI. 475. INTELLECTUAL HISTORY OF THE UNITED STATES

Selected topics in the intellectual history of America from Colonial times to the twentieth century which examine major intellectual currents and problems and the interaction between ideas and social structure. Includes discussion of parallel European developments and influences.

DR. BAKKAN

Three semester hours.

HI. 481. HISTORIOGRAPHY

A study of the writing of history. Although due attention is given to method, the main orientation is toward the problems of interpretation as they have been encountered and solved by the great historians.

MRS. BONKOWSKY, MR. DERRY

Three semester hours.

HI. 491. READING SEMINAR

The student surveys a broad area of historical research and becomes familiar with materials related to his field of specialization.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HI. 492. READING SEMINAR IN UNITED STATES HISTORY

The student surveys a broad area of historical research and works intensively with the research of a selected area.

MEMBERS OF THE DEPARTMENT

Three semester hours.

HI. 493. COORDINATING SEMINAR

Studies in selected topics in social, political, cultural, economic, and religious history.

MEMBERS OF THE DEPARTMENT

Three semester hours.

GO. 101. UNITED STATES GOVERNMENT

The origin, development, and functioning of the government of the United States, with study of the Constitution, the functioning of the executive, legislative, and judicial branches, and the role of political parties.

MEMBERS OF THE DEPARTMENT

Three semester hours.

GO. 201. AMERICAN CONSTITUTIONAL LAW

Historical survey of the Court from 1789 to the present with emphasis on leading opinions, judicial personalities, and the relationships between the Court and political events in the nation.

MR. CARROLL

Three semester hours.

GO. 225. STATE GOVERNMENT

An intensive study of the structure, function, and administration of state governments; development of state Constitutions; the place of the states in the nation; the political process; the legislature; the executive; the judiciary; state finances; administrative departments.

MR. FITZGERALD

Three semester hours.

GO. 226. MUNICIPAL GOVERNMENT

An intensive survey of the structure, functioning, and administration of urban governments; legal aspects; relationship to other units of government; metropolitan areas and their problems.

MR. FITZGERALD

Three semester hours.

EC. 201. THE DEVELOPMENT OF ECONOMIC THEORY

An analysis of the development of economic theory from the late medieval origins of capitalism to the present. Special attention is given to the development of capitalism, socialism, and syndicalism.

Three semester hours.

EC. 202. POLITICAL ECONOMY

Examines the political impact of contemporary economic theories and problems. Emphasis is placed upon the current world conflicts between the capitalistic and radical socialistic powers.

Three semester hours.

GE. 101. PRINCIPLES OF GEOGRAPHY

Physical elements such as the origin and evolution of the surface features of the earth, the oceans and inland waters, and the atmosphere and its circulation are studied in an attempt to show how these factors control man's use of the earth's surface.

Three semester hours.

DEPARTMENT OF LANGUAGES

Acting Chairman: D. PROCOPIO, *Professor*

Assistant Professor: R. ANDERSON

Instructor: D. GARFF; J. GARREAU; N. MILLS; R. SIMON

FRENCH

FR. 151. BASIC FRENCH

For students who have not previously studied French. The aims are basic oral expression, aural comprehension, and elementary reading and writing. One additional hour weekly in the language laboratory is required.

MR. GARFF, MR. GARREAU

Three semester hours.

FR. 152. BASIC FRENCH

Continuation of Fr. 151. which is a *prerequisite*.

MR. GARFF, MR. GARREAU

Three semester hours.

FR. 201. INTERMEDIATE FRENCH

Conducted largely in French, this course includes review and development of audio-lingual skills, writing, and reading. One additional hour weekly in the language laboratory is required. *Prerequisite*: achievement of an appropriate score on the placement examination, or completion of Fr. 151-152.

MRS. MILLS

Three semester hours.

FR. 202. INTERMEDIATE FRENCH

Continuation of Fr. 201 which is a *prerequisite*.

MRS. MILLS

Three semester hours.

FR. 211. MASTERPIECES OF FRENCH LITERATURE

Conducted entirely in French, the study of literature is combined with the improvement of oral and aural ability. *Prerequisite*: achievement of an appropriate score on the placement examination, or permission of the instructor.

MRS. ANDERSON

Three semester hours.

FR. 212. MASTERPIECES OF FRENCH LITERATURE

Continuation of Fr. 211 which is a *prerequisite*.

MRS. ANDERSON

Three semester hours.

FR. 301. READING COURSE IN FRENCH

For students who wish to acquire reading skill sufficient to interpret literary texts in the French language. *Prerequisite*: permission of the instructor.

MRS. MILLS

Three semester hours.

FR. 302. INTENSIVE READING COURSE IN FRENCH

Individual reading assignments are made in French texts most closely associated with the student's major interest: art, history, letters, music, science. Particular attention is given to the vocabulary of the selected area. *Prerequisite*: Fr. 301 or permission of the instructor.

MRS. MILLS

Three semester hours.

FR. 401. CONTEMPORARY FRENCH DRAMA

A survey of the principal trends in the modern theatre from the end of World War II to the present, with readings from such representative authors as Camus, Sartre, Anouilh, Beckett, and Ionesco. Conducted in French. *Prerequisite*: a reading knowledge of French or permission of the instructor.

MRS. ANDERSON

Three semester hours.

FR. 402. CONTEMPORARY FRENCH NOVEL

A survey of the trends in the French novel since World War II, with readings from Malroux, Sartre, Camus, and representatives of the "nouveau roman," chiefly Robbe-Brillet and Nathalie Sarrante. Conducted in French. *Prerequisite:* a reading knowledge of French or permission of the instructor.

MRS. ANDERSON

Three semester hours.

GERMAN

GM. 151. BASIC GERMAN

For students who have not previously studied German. The aims are basic oral expression, aural comprehension, and elementary reading and writing. One additional hour weekly in the language laboratory is required.

DR. SMITH

Three semester hours.

GM. 152. BASIC GERMAN

Continuation of Gm. 151 which is a *prerequisite*.

DR. SMITH

Three semester hours.

GM. 201. INTERMEDIATE GERMAN

Conducted largely in German, this course includes review and development of audio-lingual skills, writing, and reading. One additional hour weekly in the language laboratory is required. *Prerequisite:* achievement of an appropriate score on the placement examination, or completion of Gm. 151-152.

DR. SMITH

Three semester hours.

GM. 202. INTERMEDIATE GERMAN

Continuation of Gm. 201 which is a *prerequisite*.

DR. SMITH

Three semester hours.

ITALIAN

IT. 151. BASIC ITALIAN

For students who have not previously studied Italian. The aims are basic oral expression, aural comprehension, and elementary reading and writing. One additional hour weekly in the language laboratory is required.

DR. PROCOPIO

Three semester hours.

IT. 152. BASIC ITALIAN

Continuation of It. 151 which is a *prerequisite*.

DR. PROCOPIO

Three semester hours.

IT. 201. INTERMEDIATE ITALIAN

Conducted largely in Italian, this course includes review and development of audio-lingual skills, writing, and reading. One additional hour weekly in the language laboratory is required. *Prerequisite:* achievement of an appropriate score on the placement examination, or completion of It. 151-152.

DR. PROCOPIO

Three semester hours.

IT. 202. INTERMEDIATE ITALIAN

Continuation of It. 201 which is a *prerequisite*.

DR. PROCOPIO

Three semester hours.

IT. 301. READING COURSE IN ITALIAN

For students who wish to acquire reading skill sufficient to interpret literary texts in the Italian language. *Prerequisite:* permission of the instructor.

DR. PROCOPIO

Three semester hours.

IT. 302. INTENSIVE READING COURSE IN ITALIAN

Individual reading assignments are made in Italian texts most closely associated with the student's major interest: art, history, letters, music, science. Particular attention is given to the vocabulary of the selected area. *Prerequisite:* It. 301 or permission of the instructor.

DR. PROCOPIO

Three semester hours.

SPANISH

SP. 151. BASIC SPANISH

For students who have not previously studied Spanish. The aims are basic oral expression, aural comprehension, and elementary reading and writing. One additional hour weekly in the language laboratory is required.

MRS. SIMON

Three semester hours.

SP. 152. BASIC SPANISH

Continuation of Sp. 151 which is a *prerequisite*.

MRS. SIMON

Three semester hours.

SP. 201. INTERMEDIATE SPANISH

Conducted largely in Spanish, this course includes review and development of audio-lingual skills, writing, and reading. One additional hour weekly in the language laboratory is required. *Prerequisite:* achievement of an appropriate score on the placement examination, or completion of Sp. 151-152.

MRS. SIMON

Three semester hours.

SP. 202. INTERMEDIATE SPANISH

Continuation of Sp. 201 which is a *prerequisite*.

MRS. SIMON

Three semester hours.

SP. 301. READING COURSE IN SPANISH

For students who wish to acquire reading skill sufficient to interpret literary texts in the Spanish language. *Prerequisite*: permission of the instructor.

MRS. SIMON

Three semester hours.

SP. 302. INTENSIVE READING COURSE IN SPANISH

Individual reading assignments are made in Spanish texts most closely associated with the student's major interest: art, history, letters, music, science. Particular attention is given to the vocabulary of the selected area. *Prerequisite*: Sp. 301 or permission of the instructor.

MRS. SIMON

Three semester hours.

CLASSICS

GR. 151. BASIC MODERN GREEK

No previous knowledge of Greek required. The aims are basic oral expression, aural comprehension, and elementary reading and writing.

DR. BENTAS

Three semester hours.

GR. 152. BASIC MODERN GREEK

Continuation of Gr. 151, with an introduction to readings in contemporary Greek literature, both prose and poetry. A good foundation for advanced study in modern or classical Greek. *Prerequisite*: Gr. 151 or permission of the instructor.

DR. BENTAS

Three semester hours.

GR. 201. INTERMEDIATE GREEK

Review and development of audio-lingual skills, writing, and reading in modern Greek, followed by an introduction to classical Greek and the reading of Greek texts taken from the Classical, Byzantine, and Modern Greek periods. *Prerequisite*: Gr. 151-152.

DR. BENTAS

Three semester hours.

GR. 202. INTERMEDIATE GREEK

Continuation of Gr. 201 which is a *prerequisite*.

DR. BENTAS

Three semester hours.

GR. 301. GREEK CLASSICS

Concentrated readings in particular authors of Greek literature such as Xenophon, Homer, Herodotus, Plato, the dramatists. *Prerequisite*: Gr. 201-202.

DR. BENTAS

Three semester hours.

GR. 302. GREEK CLASSICS

Continuation of Gr. 301 which is a *prerequisite*.

DR. BENTAS

Three semester hours.

LA. 201. BASIC LATIN READING

A course for beginners and for students wishing to review the elements of Latin and to acquire, thereby, an ability to read selected passages from Latin authors.

DR. BENTAS

Three semester hours.

LA. 202. BASIC LATIN READING

Continuation of La. 201, with emphasis on reading Latin prose and poetry, with special attention to the works of Cicero and/or the first six books of Virgil's *Aeneid*. *Prerequisite*: La. 201 or permission of the instructor.

DR. BENTAS

Three semester hours.

LA. 301. LATIN CLASSICS

Concentrated readings in particular authors of Latin literature such as Ovid, Lucretius, Catullus, Horace, Livy, Tacitus, Juvenal. *Prerequisite*: La. 201-202.

DR. BENTAS

Three semester hours.

LA. 302. LATIN CLASSICS

Continuation of La. 301 which is a *prerequisite*.

DR. BENTAS

Three semester hours.

DEPARTMENT OF MATHEMATICS

Chairman: W. MALONE, *Professor*

Assistant Professor: L. ANDRUSAITUS; W. COPLEY; C. NIEUWEJAAR

Instructor: A. GENDLER

MA. 101. MODERN MATHEMATICS I

Mathematical system for set of natural numbers reviewed. Sets developed, binary operations of union and intersection and unary operation of complements defined. Analogy between properties common to systems of natural numbers and of sets. Other mathematical systems introduced and compared to system of natural numbers.

MEMBERS OF THE DEPARTMENT

Three semester hours.

MA. 102. MODERN MATHEMATICS II

Continuation of Ma. 101 which is *prerequisite*. Set theory applied to geometry included.

MEMBERS OF THE DEPARTMENT

Three semester hours.

MA. 103. MODERN MATHEMATICS III

Selected topics in modern mathematics. *Prerequisite*: Ma. 101.

MR. COPLEY

Three semester hours.

MA. 104. COLLEGE ALGEBRA

Numbers of algebra; functions and their graphs; variations; systems of equations; elementary theory of equations; determinants; probability.

DR. MALONE

Three semester hours.

MA. 201. MATHEMATICAL ANALYSIS I

A systematic study of many different modes of variation wherein the student discovers exact relations between varying quantities, and devises suitable methods of making any necessary calculations. The course includes topics from elementary analytic geometry, elementary calculus, and trigonometry.

MR. ANDRUSAITIS

Three semester hours.

MA. 202. MATHEMATICAL ANALYSIS II

Continuation of Ma. 201 with emphasis on topics in probability and statistics. *Prerequisite*: Ma. 201.

MR. ANDRUSAITIS

Three semester hours.

MA. 203. MATHEMATICAL ANALYSIS III

Continuation of Ma. 201-202. Special topics.

MR. ANDRUSAITIS

Three semester hours.

MA. 204. CALCULUS I

Analytic geometry and calculus for functions of more than one variable.

MR. GENDLER

Three semester hours.

MA. 205. CALCULUS II

Continuation of Ma. 204 which is a *prerequisite*.

MR. GENDLER

Three semester hours.

MA. 206. ELEMENTARY PROBABILITY

Combinational analysis with application to computation of probabilities, combinations of events. Repeated trials, discrete random variables. Law of large numbers.

MR. NIEUWEJAAR

Three semester hours.

MA. 207. ELEMENTARY STATISTICS

Sample and population measures of central tendency and variability; curve fitting; normal and *t* distributions; regression and correlation; confidence limits.

MR. NIEUWEJAAR

Three semester hours.

PHILOSOPHY

Associate Professor: R. LYONS

Assistant Professor: C. SMITH

Instructor: R. LAWSON

PH. 101. INTRODUCTION TO PHILOSOPHY

A survey of the basic problems of philosophy and the alternative solutions as represented in the thought of the more significant western philosophers.

DR. LYONS, DR. SMITH

Three semester hours.

PH. 401. MODERN PHILOSOPHY I

Selected readings of the major philosophical figures from Descartes to Hegel.

DR. LYONS

Three semester hours.

PH. 402. MODERN PHILOSOPHY II

Selected readings of the major philosophical figures from Schopenhauer to Bergson.

DR. LYONS

Three semester hours.

PH. 411. AMERICAN PHILOSOPHY

An intensive historical examination of the main figures in American philosophy from colonial times to the late nineteenth century.

DR. LYONS

Three semester hours.

See also: ED. 281. PHILOSOPHY OF EDUCATION

MR. LAWSON, DR. LYONS

PH. 412. RATIONALISM AND EMPIRICISM IN POLITICAL THEORY

An examination of rationalism and empiricism in political theory from Plato to the nineteenth century.

DR. SMITH

Three semester hours.

PH. 413. EXISTENTIALISM

An examination of the ideas and impact of leading existentialist philosophers.

DR. SMITH

Three semester hours.

GRADUATE SCHOOL

OFFICERS OF ADMINISTRATION

DANIEL H. O'LEARY	<i>President</i>
A.B., A.M., Ph.D., Boston College	
JOHN J. FISHER	<i>Academic Dean</i>
A.B., St. John's University	
A.M., Ed.D., Columbia University	
WILLIAM R. FISHER	<i>Dean, Graduate School</i>
B.S.Mus., A.M., New York University	
Ed.D., Boston University	

GRADUATE COUNCIL

WILLIAM C. BURTO	<i>Director, Division of General Studies</i>
A.B., Colgate University	
A.M., Ph.D., Harvard University	
EDWARD F. GILDAY	<i>Director, Division of Fine Arts</i>
B.S.Mus., A.M., New York University	
D.Mus.A., Boston University	
D.Litt. (<i>Hon.</i>), Emerson College	
D.L.H. (<i>Hon.</i>), Boston College	
PATRICIA A. GOLER	<i>Chairman, Department of History</i>
A.B., Regis College	
A.M., Ph.D., Boston College	
MARGUERITE L. GOURVILLE	<i>Director, Division of Professional Education</i>
B.S., Marywood College	
A.M., Boston University	
ETHEL N. KAMIEN	<i>Chairman, Department of Biological and Physical Sciences</i>
A.B., Brooklyn College	
M.S., Ph.D., University of Wisconsin	
WILLIAM R. FISHER, <i>Chairman</i>	<i>Dean, Graduate School</i>
JOHN J. FISHER, <i>Ex Officio</i>	<i>Academic Dean</i>

Graduate study is administered by the Dean of the Graduate School in cooperation with the various departments of the college. He, in collaboration with the Graduate Council, exercises overall review and supervision of all graduate programs leading to the degree of Master of Education or Master of Music Education.

ACADEMIC CALENDAR

FALL SEMESTER, 1967

September	11	First meetings of classes
October	12	Columbus Day: no classes
	28	Graduate Record Examinations
November	10	Veterans' Day: no classes
	15	Last day for filing applications for admission in the Spring semester
	17	Auditions for applicants for admission to a M.Mus.Ed. degree program (4:00-7:00 P.M.)
	23-24	Thanksgiving recess
December	18	Christmas recess begins
January	3	Resumption of classes
	15	Final meetings of classes
	16	Reading day
	17	Examinations in courses begin
	20	Graduate Record Examinations
	23	Examinations in courses end

SPRING SEMESTER, 1968

January	31	First meetings of classes
February	22	Washington's Birthday: no classes
March	11	Spring recess begins
	18	Resumption of classes
April	12	Easter recess begins
	15	Last day for filing applications for admission in the Fall semester
	22	Resumption of classes
	22	Auditions for applicants for admission to a M.Mus.Ed. degree program (4:00-7:00 P.M.)

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| May | 1 | Last day for filing applications for admission in the Summer Session |
| | 4 | Auditions for applicants for admission to a M.Mus.Ed. degree program (1:00-4:00 P.M.) |
| | 29 | Final meetings of classes |
| | 30 | Memorial Day |
| | 31 | Reading day |
| June | 3 | Examinations in courses begin |
| | 7 | Examinations in courses end |
| | 9 | Commencement |

SUMMER SESSION, 1968

- | | | |
|--------|----|---------------------------|
| July | 8 | First meetings of classes |
| August | 16 | Examinations in courses |

ADMISSION POLICIES

Admission to candidacy for the degree of Master of Education and Master of Music Education is based on the following criteria: the applicant's undergraduate and graduate academic record, his performance on the *Miller Analogies Test* or the *Graduate Record Examination*, letters of recommendation, and information gained from a personal interview.

REQUIREMENTS FOR ADMISSION

BACCALAUREATE DEGREE. To be eligible for admission, an applicant must have earned a baccalaureate degree from a nationally accredited institution.

ACADEMIC RECORD. The applicant must have achieved a grade-point average of 2.5 (on a four-point scale) or better on his academic record.

GRADUATE EXAMINATIONS. All applicants must take the *Miller Analogies Test* or the *Aptitude Test* of the *Graduate Record Examination*. An *Advanced Test* of the *Graduate Record Examination* and/or a special departmental placement examination may also be required, where such is recommended by a major department.

REFERENCES. Two references are required from individuals who are familiar with the applicant's academic record and/or professional ability and personal characteristics, such as an undergraduate course instructor or an official of the school in which the applicant has taught.

INTERVIEW. Arrangements for a personal interview are made by the Dean of the Graduate School.

SPECIAL REQUIREMENTS. In addition to the above requirements, applicants interested in the Master of Music Education degree program must show competency in three of the following areas:

1. Music History and Literature — an understanding and appreciation of the forms and styles of music of the various eras in music history.
2. Basic theory of music — fundamentals of music and harmony.
3. Performance ability of a competent and musical nature in one field of applied music.

4. Functional use of one or more of the following: *Piano* — ability to use the piano in a functional manner, playing easy accompaniments, folk songs, and chorales. *Voice* — ability to use the voice in a pleasing manner giving evidence of breath control, principles of enunciation and pronunciation as applied to singing, tone placement, and the essentials of a musical interpretation; ability to sing easily at sight unison and part songs of the difficulty found in the basic music series. *Orchestral instruments* — a playing acquaintance with one orchestral instrument in each section of the orchestra.

5. Music in the elementary or the secondary school.

PROCEDURES FOR ADMISSION

APPLICATION FORMS. Application for admission to the graduate programs must be made on a form provided by the college and which may be obtained by writing to the Dean of the Graduate School.

The deadline dates for receipt of applications are April 15, for enrollment in the Fall semester; November 15, for enrollment in the Spring semester; May 1, for enrollment in the Summer session.

TRANSCRIPTS. Applicants are responsible for submitting official transcripts from all undergraduate and graduate institutions attended.

EXAMINATION SCORES. The applicant must submit his scores from the *Miller Analogies Test* or the *Graduate Record Examinations*. He should direct the appropriate test authority to send his scores to the Dean of the Graduate School.

The *Miller Analogies Test* is administered by many college and university counseling services either weekly or on request. Applicants can obtain information about this test and a list of testing centers by writing to the *Psychological Corporation*, 304 East 45th Street, New York, New York, 10017.

The *Graduate Record Examinations* are given six times a year at many college or university examination centers. A list of these centers, together with the dates, application blanks and instructions for taking the tests can be obtained from *Graduate Record Examinations, Educational Testing Service, Princeton, New Jersey, 08540*.

REFERENCE FORMS. These forms are sent to the applicant when he requests the application form. The applicant distributes them to *two* persons of his choice, in compliance with the requirements stated previously, and directs them to send the completed forms to the Dean of the Graduate School.

INTERVIEW. Following receipt of the application form, official transcripts, examination scores, and references, the Dean of the Graduate School arranges an appointment with the applicant for a personal interview.

ACADEMIC POLICIES

ACADEMIC ADVISER

At the time of admission to graduate study, the degree candidate is assigned a faculty adviser in the area of the student's field of concentration. In consultation with his adviser, the student plans his entire program of study and submits it on the form entitled *Planned Program of Study*.

The candidate may be required to undertake course work in addition to the normal requirements for the degree if his background appears inadequate or inappropriate. Such additional study must be taken without credit toward the advanced degree.

TRANSFER CREDIT

A maximum of six semester hours may be accepted as transfer credit from an institution which holds national accreditation for graduate study. Such course work must be of graduate level, of *B* grade or better, and accepted by that institution for credit toward a master's degree. The transfer of credit is subject to the approval of the Dean of the Graduate School.

GRADING SYSTEM

A grade of *A* indicates superior performance. It is assigned to those graduate students who show unusual ability in dealing with the ideas and content of the course and in achieving the goals established by the professor.

A grade of *B* indicates performance which is good and of the quality expected of a graduate student. It means that the student has achieved the objectives of the course and has consistently performed at an acceptable level.

A grade of *C* indicates performance which is below the level of achievement expected of graduate students.

No grade of *C* is allowed in the student's field of concentration. No more than three semester hours credit of *C* grade is allowed in the total program. A second grade of *C* results in action by the Graduate Council which may elect to have the student take an additional course,

to place him on probation, or to terminate his candidacy. In the event that a student receives a third grade of *C*, his candidacy is terminated.

DEGREE REQUIREMENTS

To receive the degree of Master of Education or of Master of Music Education, a candidate must meet the following requirements:

Complete an individually planned program of graduate study with a minimum of thirty semester hours of credit including: a basic three-semester hour course in research techniques; a minimum of twelve to fifteen semester hours in the arts and sciences; a minimum of twelve to fifteen semester hours in his field of concentration.

Achieve a cumulative grade-point average of 3.0 or better.

Complete successfully the comprehensive written and/or oral examinations in his field of concentration.

Present evidence of at least one year of successful teaching experience, or of a program of supervised teaching.

Fulfill all requirements for the degree within a six year period immediately prior to the awarding of the degree.

Be recommended for the degree by his academic adviser and the chairman of the department in his field of concentration. The final recommendation for the awarding of the degree is then made by the Graduate Council to the President.

COURSE LOAD

Degree candidates who carry full-time teaching, supervisory, or administrative responsibilities may take no more than six semester hours of course credit in any semester, including the summer session. In the event that a student takes a course in applied music or ensemble, he may be permitted to carry one additional semester hour of course credit.

A minimum of twelve semester hours credit per semester is considered a full-time graduate program.

SCHEDULE OF CLASSES

Classes are scheduled to meet twice a week in the late afternoon and evenings as follows:

Monday and Wednesday: 4:15-5:30; 6:15-7:30; 7:45-9:00.
Tuesday and Thursday: 4:15-5:30; 6:15-7:30; 7:45-9:00.

FEES AND EXPENSES

TUITION FEE

The tuition fee for students who are legal residents of Massachusetts is \$18.00 per semester hour. A resident of Massachusetts must submit a *Certificate of Residence* properly authenticated by the Town or City Clerk of the community in which he resides.

For students who are non-residents of Massachusetts, the tuition fee is \$25.00 per semester hour.

REGISTRATION FEE

The registration fee for all students is \$2.50 per semester and is non-refundable.

GRADUATE STUDENT ACTIVITIES FEE

Every student is required to pay an activities fee of \$2.50 per semester.

MUSIC ACTIVITIES FEE

A student enrolled in the Master of Music Education degree program is required to pay a fee of \$60.00 for each of the semesters in which he is assigned to take Mu. 500 and Mu. 501.

PAYMENT OF FEES

All fees are payable in advance, on or before the day of registration for each semester.

Checks in payment of the tuition fee and the registration fee must be made payable to *Massachusetts State College at Lowell*.

The check covering payment of the graduate student activities fee must be made payable to: *Massachusetts State College at Lowell Graduate Activities Fee*.

Payment of the music activities fee must be a check made payable to: *Music Activities Fee, Massachusetts State College at Lowell*.

INFORMATION FOR VETERANS

The Veterans Administration has approved the Massachusetts State College at Lowell for study leading to a Master's degree.

Veterans who are registered for twelve semester hours of graduate study are paid for full-time training; nine semester hours, three-quarter time training; six semester hours, half-time training. Anything less than six semester hours is less than half-time training.

Students who feel they are eligible for veterans' training under any of the public laws applicable to veterans' education must take their honorable discharge to the Veterans Administration, Kennedy Memorial Building, Government Center, Boston, Massachusetts. If the Veterans Administration determines that the veteran is entitled to educational benefits, it will give him a *Certificate of Eligibility* which must be presented to the Dean of the Graduate School. The college will then notify the Veterans Administration that the veteran is in attendance as a student. The monthly payments are then made to the veteran by the Veterans Administration.

GRADUATE DEGREE PROGRAMS

The Massachusetts State College at Lowell, through its Graduate School, offers programs of study leading to the Master of Education degree and the Master of Music Education degree.

MASTER OF EDUCATION

The Master of Education degree is offered in the following fields of concentration:

Elementary Education
Administration and Supervision
Reading

(The concentration in Reading will be inaugurated in September, 1968.)

Each program is individually planned, taking into account the academic and professional preparation of the degree candidate as well as the purposes for which he is undertaking graduate study.

PLAN OF STUDIES

The plan of studies for *all* programs leading to the Master of Education degree is composed of basic requirements in each of the following three areas:

Research techniques;
Arts and sciences;
Field of concentration.

RESEARCH TECHNIQUES. Every student is required to take the following *three semester hour* course: Ed. 500. Research Techniques.

ARTS AND SCIENCES. The candidate must take *a minimum of twelve to fifteen semester hours* in the liberal arts and sciences which he selects from *one* of the following blocks:

- Hu. 550-559. The Humanities in the Eighteenth Century: Art, History, Literature, Music, Philosophy.
- Hu. 560-569. The Humanities in the Nineteenth Century: Art, History, Literature, Music, Philosophy.
- Hu. 570-579. The Humanities in the Twentieth Century: Art, History, Literature, Music, Philosophy.
- Sc. 580-589. The Sciences and Mathematics: Biological and Physical Sciences and Mathematics.

FIELD OF CONCENTRATION. The student must take *a minimum of twelve to fifteen semester hours* which he selects from the courses offered in his field of concentration. The fields of concentration and their course offerings are described below.

CONCENTRATION: ELEMENTARY EDUCATION

(Program I)

This program is designed for students, with or without teaching experience, whose field of concentration was in education.

The course offerings in this field of concentration are listed below. The credit for each course is *three semester hours*.

- Ed. 501. Case Studies in Child Adjustment.
- Ed. 502. Education of the Urban and Rural Child.
- Ed. 503. Programmed Instruction and Teaching Machines.
- Ed. 504. Creative Approach to Children's Literature.
- Ed. 505. Science Education in the Atomic Age.
- Ed. 506. Education of the Gifted Child.
- Ed. 507. Group Processes in Education.
- Ed. 508. Elementary School Curriculum
- Ed. 510. Problems in Elementary Mathematics Instruction.
- Ed. 511. Improvement in Reading at the Elementary Level.
- Ed. 512. Advanced Seminar in Elementary Education.
- Ed. 540. The Psychology of Human Learning.

CONCENTRATION: ELEMENTARY EDUCATION

(Program II)

This program is for students, with or without teaching experience, whose field of concentration was in the liberal arts.

The course offerings in this field of concentration are stated below.
The credit for each course is *three semester hours*.

- Ed. 501. Case Studies in Child Adjustment.
- Ed. 502. Education of the Urban and Rural Child.
- Ed. 503. Programmed Instruction and Teaching Machines.
- Ed. 508. Elementary School Curriculum.
- Ed. 510. Problems in Elementary Mathematics Instruction.
- Ed. 511. Improvement in Reading at the Elementary Level.
- Ed. 512. Advanced Seminar in Elementary Education.
- Ed. 513. Current Trends in the Teaching of Reading and Language Arts. (Practices and Procedures)
- Ed. 514. Current Trends in the Teaching of the Fine Arts. (Programs for Guiding Creative Activities)
- Ed. 515. Current Trends in the Teaching of Science and Mathematics. (Number Systems and Fundamental Operations)
- Ed. 516. Current Trends in Social Studies Education. (Programs and Unit Procedures)
- Ed. 540. The Psychology of Human Learning.

CONCENTRATION: ADMINISTRATION AND SUPERVISION

(Program III)

The course offerings in this field of concentration are listed below.
The credit for each course is *three semester hours*.

- Ed. 502. Education of the Urban and Rural Child.
- Ed. 518. Educational Organization and Administration.
- Ed. 519. Innovations in Elementary Instruction.
- Ed. 520. School Maintenance and Control.
- Ed. 521. Financing the Public Schools: Federal, State, Local.
- Ed. 522. Community Resources and Federal Subsidies.
- Ed. 523. Personnel Relationships.
- Ed. 524. Supervision in the Elementary School.
- Ed. 525. School Law.
- Ed. 526. The School, Community, and the Juvenile.
- Ed. 527. Curriculum Development in the Elementary School.
- Ed. 528. Seminar in Administration and Supervision.
- Ed. 540. The Psychology of Human Learning.

CONCENTRATION: READING

(Program IV)

The course offerings in this field of concentration are stated below.
The credit for each course is *three semester hours*.

- Ed. 502. Education of the Urban and Rural Child.
- Ed. 504. Creative Approach to Children's Literature.
- Ed. 505. Science Education in the Atomic Age.
- Ed. 506. Education of the Gifted Child.
- Ed. 507. Group Processes in Education.
- Ed. 508. Elementary School Curriculum.
- Ed. 509. Teaching the Slow Learning Child in a Self Contained Classroom.
- Ed. 518. Seminar in Special Areas of Elementary Education.
- Ed. 524. Supervision in the Elementary School.
- Ed. 527. Reading and Study in the Elementary School.
- Ed. 528. Analysis of Reading Difficulties in the Elementary School.
- Ed. 529. Reading Clinics in Elementary Schools.
- Ed. 530. Psychology of Adolescence and its Effect upon Reading.
- Ed. 532. Seminar in the Teaching of Reading.
- Ed. 540. The Psychology of Human Learning.

MASTER OF MUSIC EDUCATION

The Master of Music Education is offered in the following fields of concentration:

Teaching, Supervision, or Administration of Music Education
 Teaching and Conducting of Choral Music
 Teaching and Conducting of Instrumental Music

Each program is individually planned, taking into account the academic and professional preparation of the degree candidate as well as the purposes for which he is undertaking graduate study.

PLAN OF STUDIES

The plan of studies for *all* programs leading to the Master of Music Education degree is composed of basic requirements in each of the following three areas:

Research techniques;
 Arts and sciences;
 Field of concentration.

RESEARCH TECHNIQUES. Every student is required to take the following *three semester hour* course: Ed. 500. Research Techniques.

ARTS AND SCIENCES. The candidate must take *a minimum of twelve to fifteen semester hours* in the liberal arts and sciences. He is *required* to take the following courses:

Mu. 500, 501. Applied Music (*two semester hours*; one semester hour per semester).

Mu. 510, 511. Ensemble (*one semester hour*; one-half semester hour per semester).

He then *elects a minimum of nine to twelve semester hours from the following blocks*:

Music Theory and Composition (each course carries *three semester hours*):

Mu. 520. Sixteenth Century Counterpoint.

Mu. 521. Fugue.

Mu. 522. Structural Analysis.

Mu. 523. Composing and Arranging for Vocal and/or Instrumental Groups.

Mu. 524. Twentieth Century Techniques in Composition.

Musicology (each course carries *three semester hours*):

Mu. 530. The Development of Instrumental Forms.

Mu. 531. The Development of the Musical Theater.

Mu. 532. The Development of Vocal Forms.

Mu. 533. Chamber Music.

When a candidate's background permits, he is encouraged to fulfill requirements in this area by selecting courses from the following blocks:

Hu. 550-559. The Humanities in the Eighteenth Century: Art, History, Literature, Music, Philosophy.

Hu. 560-569. The Humanities in the Nineteenth Century: Art, History, Literature, Music, Philosophy.

Hu. 570-579. The Humanities in the Twentieth Century: Art, History, Literature, Music, Philosophy.

Sc. 580-589. The Sciences and Mathematics: Biological and Physical Sciences and Mathematics.

FIELD OF CONCENTRATION. The student must take *a minimum of twelve to fifteen semester hours* which he selects from the courses offered in his field of concentration. The fields of concentration and their course offerings are described below.

CONCENTRATION: TEACHING, SUPERVISION, OR ADMINISTRATION OF
MUSIC EDUCATION

(Program I)

The course offerings in this field of concentration are listed below.
The credit for each course is *three semester hours*.

- Mu. 550. Developing Philosophies in Music Education.
- Mu. 551. Supervision and Administration of Music Education.
- Mu. 552. New Approaches in Teaching Music in the Elementary School.
- Mu. 553. Teaching Music through the Humanities Approach in the Secondary Schools.
- Mu. 554. Philosophical and Psychological Basis of Music Education.
- Mu. 556. Pedagogy of Music Theory.
- Mu. 557. Seminar or Directed Study in Music Education.
- Ed. 540. The Psychology of Human Learning.

CONCENTRATION: TEACHING AND CONDUCTING OF CHORAL MUSIC
(Program II)

The course offerings in this field of concentration are listed below.
The credit for each course is *three semester hours*.

- Mu. 550. Developing Philosophies in Music Education.
- Mu. 560. Research in Choral Literature.
- Mu. 561. Conducting Major Choral Literature.
- Mu. 562. Organization and Development of Choral Groups.
- Mu. 563. Problems in Choral Styles.
- Mu. 564. The Use of Foreign Language in Choral Literature.
- Mu. 565. Techniques of Group and Individual Vocal Training.
- Mu. 567. Seminar or Directed Study in Vocal Music.
- Ed. 540. The Psychology of Human Learning.

CONCENTRATION: TEACHING AND CONDUCTING OF INSTRUMENTAL MUSIC

(Program III)

The course offerings in this field of concentration are listed below.
The credit for each course is *three semester hours*.

- Mu. 550. Developing Philosophies in Music Education.
- Mu. 570. Research in Instrumental Literature.
- Mu. 571. Organization and Development of Instrumental Groups.
- Mu. 572. Problems in Conducting Instrumental Styles.
- Mu. 573. Techniques of Group and Individual Instrumental Training.
- Mu. 574. Seminar or Directed Study in Instrumental Music.
- Ed. 540. The Psychology of Human Learning.

